INITIAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

DESOTO CANYON BLOCK 618, OCS-G-23526

Dominion Exploration & Production, Inc.
1450 Poydras Street
New Orleans, Louisiana 70112-6000

PUBLIC INFORMATION COPY

Submitted:

May 13, 2005

Intial Development Operations Coordination Document

Dominion Exploration & Production, Inc.
DeSoto Canyon Block 618 - OCS-G-23526
Locations #1, #2 & #3

Table of Contents

PUBLIC INFORMATION

Appendix A
Contents of Plan

(A) **Description, Objectives and Schedule:** In accordance with 30 CFR 250.203(a)(b), Dominion Exploration & Production, Inc. proposes to conduct developmental activities at DeSoto Canyon Block 618. Plans are to subsea complete and produce two (2) previously drilled wells, DC 681 #1 and DC 618 #2, and one (1) proposed well, DC 618 #3, with the surface and bottom holes located in Block 618. The DC 618 #3 Well will be drilled from the Initial Exploration Plan, N-07928, approved December 5, 2003, as revised on May 5, 2005, R-04161. The subsea system for San Jacinto will consist of the two producing wells and one proposed well tied into an 8" flow line spur that will run from San Jacinto to the Spiderman (DC 620) / San Jacinto (DC 618) "shared" subsea system (see attached). The flow line is an 8.625" O.D. x 0.675" w.t. for a distance of approximately one (1) mile. All wells will be equipped with a 10,000 psi horizontal, subsea tree In approximately 8,100' water depth

No well testing/flaring are planned at this time. Wells were temporarily abandoned in accordance with 30 CFR Part 250 Subpart G. Following is a schedule of proposed activities and approximated time requirements:

Activity Schedule	Date of Action
Install 8" Pipeline & 6" Jumpers	March 1, 2006 – March 14, 2006
Subsea Complete Well DC 618 #1	April 1, 2006 – April 30, 2006
Subsea Complete Well DC 618 #2	May 1, 2006 – May 30, 2006
Subsea Complete Well DC 618 #3	June 1, 2006 – June 30, 2006
Tie in to DC 620 8" Pipeline	August 1, 2006
Commence Production	July 1, 2007

(B) **Location:** DeSoto Canyon Block 618 is located approximately 90 statute miles southeast of South Pass, Louisiana. A vicinity map is included as an attachment to Appendix A. Water depth for the referenced locations is 7,675' – 7,865'. A Proprietary Plat indicating the surface location (SL), bottom-hole location (BHL), true vertical depth (TVD), measured depth (MD), and water depth for each proposed location is included as an attachment to Appendix A (omitted from Public Information).

A moored semi-submersible rig will be used for completion operations of the three (3) wells; therefore, plats laying out the anchor patterns are attached.

(C) **Drilling Unit:** A moored semi-submersible rig such as the "Noble Amos Runner" will be utilized for proposed completion activities. The rig is equipped with numerous

APPENDIX A (CONTINUED)
CONTENTS OF PLAN

safety and environmental features, such as, curbs, gutters, drip pans and drains to collect all contaminants not authorized to discharge. Safety features will include well control and blowout prevention equipment as described in 30 CFR 250.300.

(D) **Production Facility:** Gas production from the San Jacinto field will be processed through an Independence Floating Production System (FPS) designed to process 850 mmscfd of gas, up to 4,250 bpd of condensate, and a minimum of 3,000 bpd of water. The FPS is comprised of a semi-submersible floating vessel permanently anchored on location by mooring lines capable of operation and survival in extreme Gulf of Mexico weather conditions. The FPS will be located at Mississippi Canyon Block 920 and is addressed in Anadarko Petroleum Corporation's Development Operations Coordination Document submitted to MMS on April 22, 2005.

The subsea architecture for San Jacinto will consist of the two producing wells plus accommodations for the proposed third well tied into an 8" flow line spur that will run from San Jacinto to the Spiderman/San Jacinto "shared" subsea system. This "shared" subsea system includes dual flow lines (8" and 10") starting at Spiderman and tied back to the FPS. The shared production manifold will (a) allow for the ability to direct the San Jacinto subsea well production into either or both of the flow lines on the Shared Production Gathering System and (b) include hydraulically actuated valves that can be controlled from the host facility by way of the shared manifold subsea control module that will allow for the remote selection of the flow path of San Jacinto production into either or both Shared Production Gathering System flow lines.

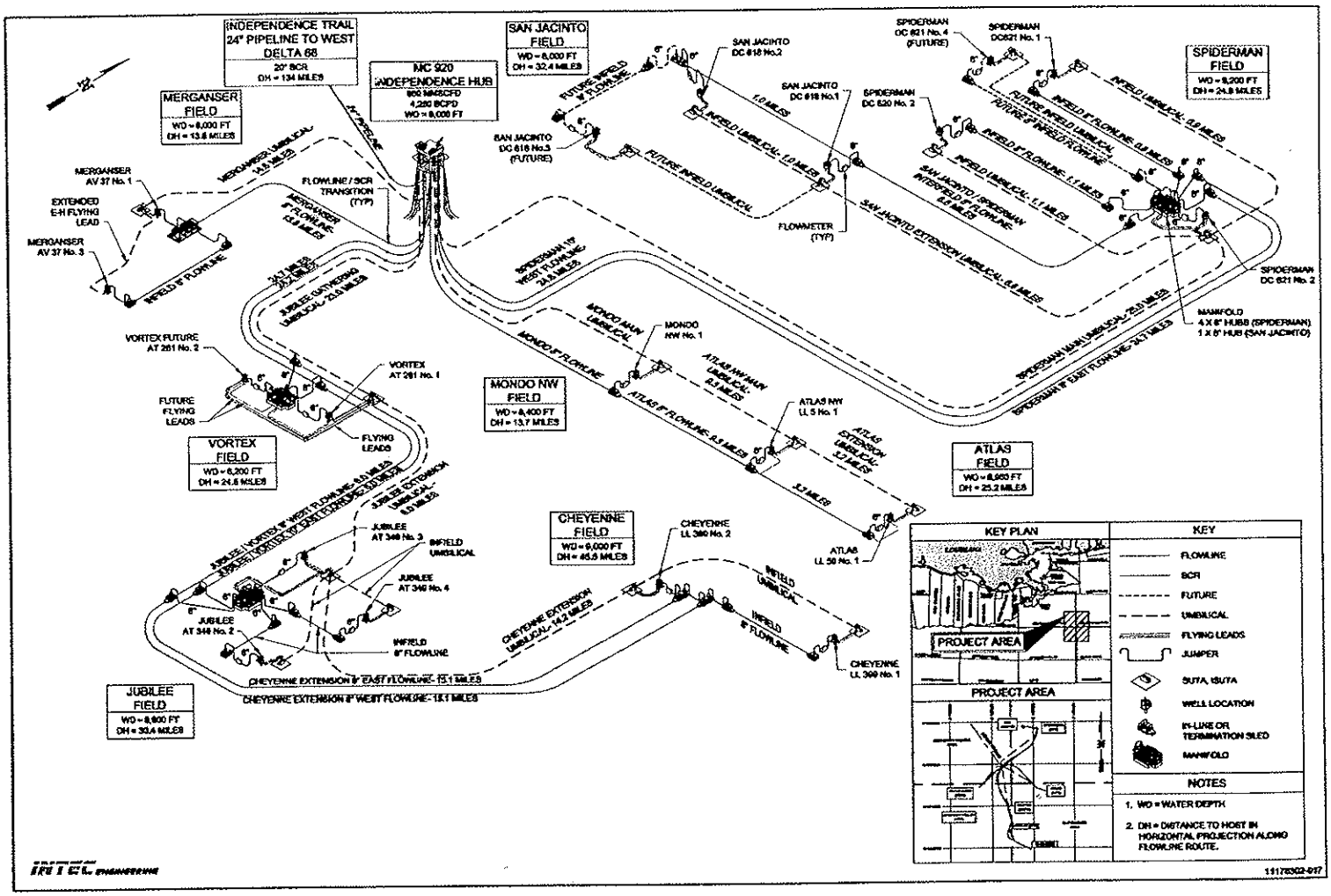
Individual jumpers and in-field flow lines will tie each of the three wells into the 8" San Jacinto flow line spur. The spur will then be connected to the shared system via a production manifold with dual selector valves that access either of the two Spiderman shared flow lines. The dual flow line system allows isolation of the two flow lines into separate high and low-pressure well-flow systems.

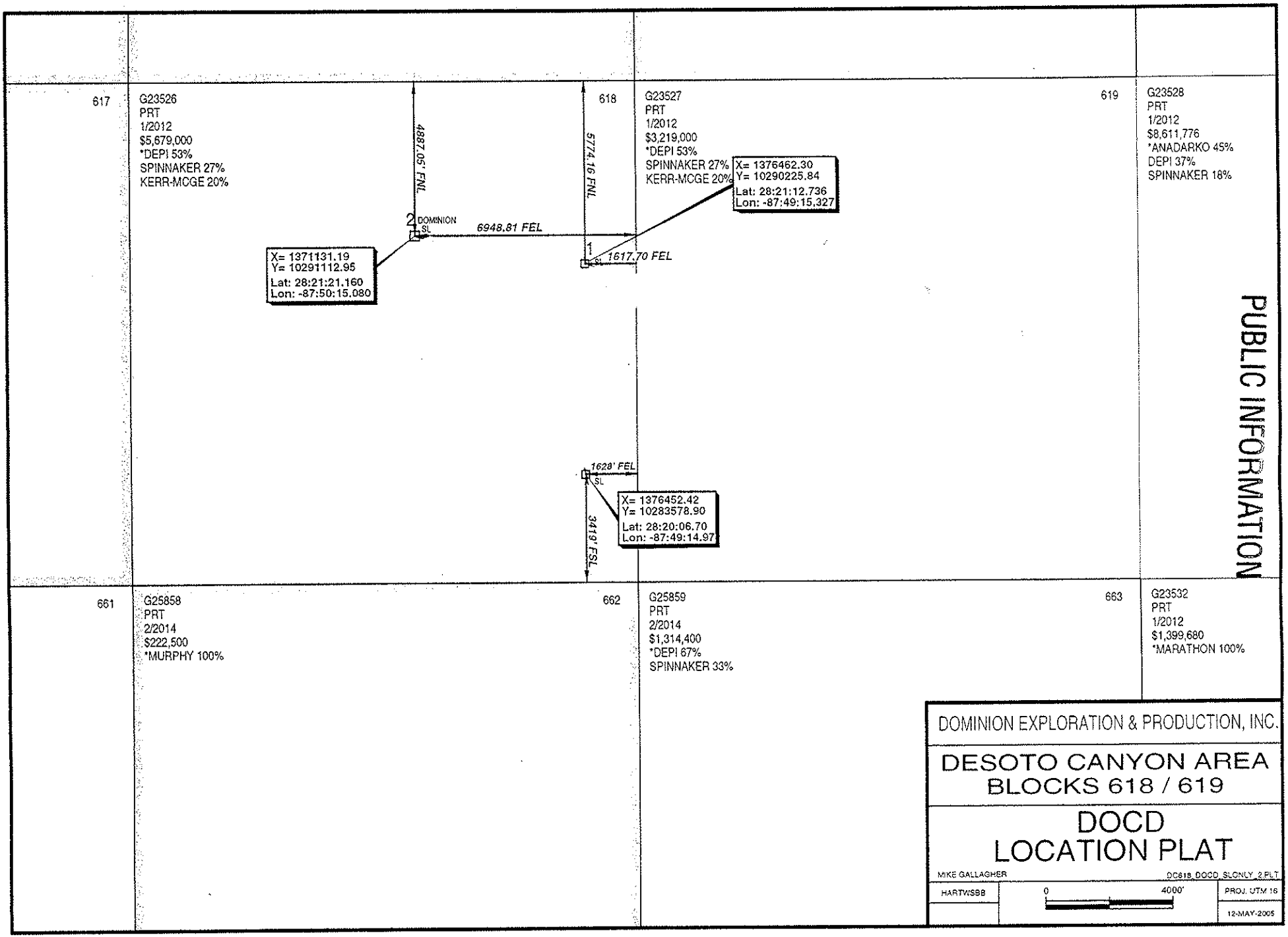
Horizontal subsea trees with vertical connectors will be used. A multiplex electro-hydraulic system will be used to control and monitor the subsea facilities from a Master Control Station (MCS) on the FPS.

Attachments to Appendix A

- Flow line schematic
- Location Plat w/SL, BHL, MD, TVD, X -Y, and Lease Line calls *(Proprietary)*
- Vicinity map of Block 618 relative to the Louisiana Coast
- Bathymetry map *(Proprietary)*
- Location Table
- Anchor Pattern Plats

PUBLIC INFORMATION




617
G23526
PRT
1/2012
$5,679,000
*DEPI 53%
SPINNAKER 27%
KERR-MCGE 20%
618
G23527
PRT
1/2012
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*DEPI 53%
SPINNAKER 27%
KERR-MCGE 20%
619
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PRT
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DEPI 37%
SPINNAKER 18%
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5774.16 FNL
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DOMINION SL
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1617.70 FEL
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Lon: -87:50:15.080
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SL
3419' FSL
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Lat: 28:20:06.70
Lon: -87:49:14.97
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*DEPI 67%
SPINNAKER 33%
663
G23532
PRT
1/2012
$1,399,680
*MARATHON 100%
PUBLIC INFORMATION
DOMINION EXPLORATION & PRODUCTION, INC.
DESOTO CANYON AREA
BLOCKS 618 / 619
DOCD
LOCATION PLAT
MIKE GALLAGHER
DC618_DOCD_SLONLY_2.PLT
HARTWSSB
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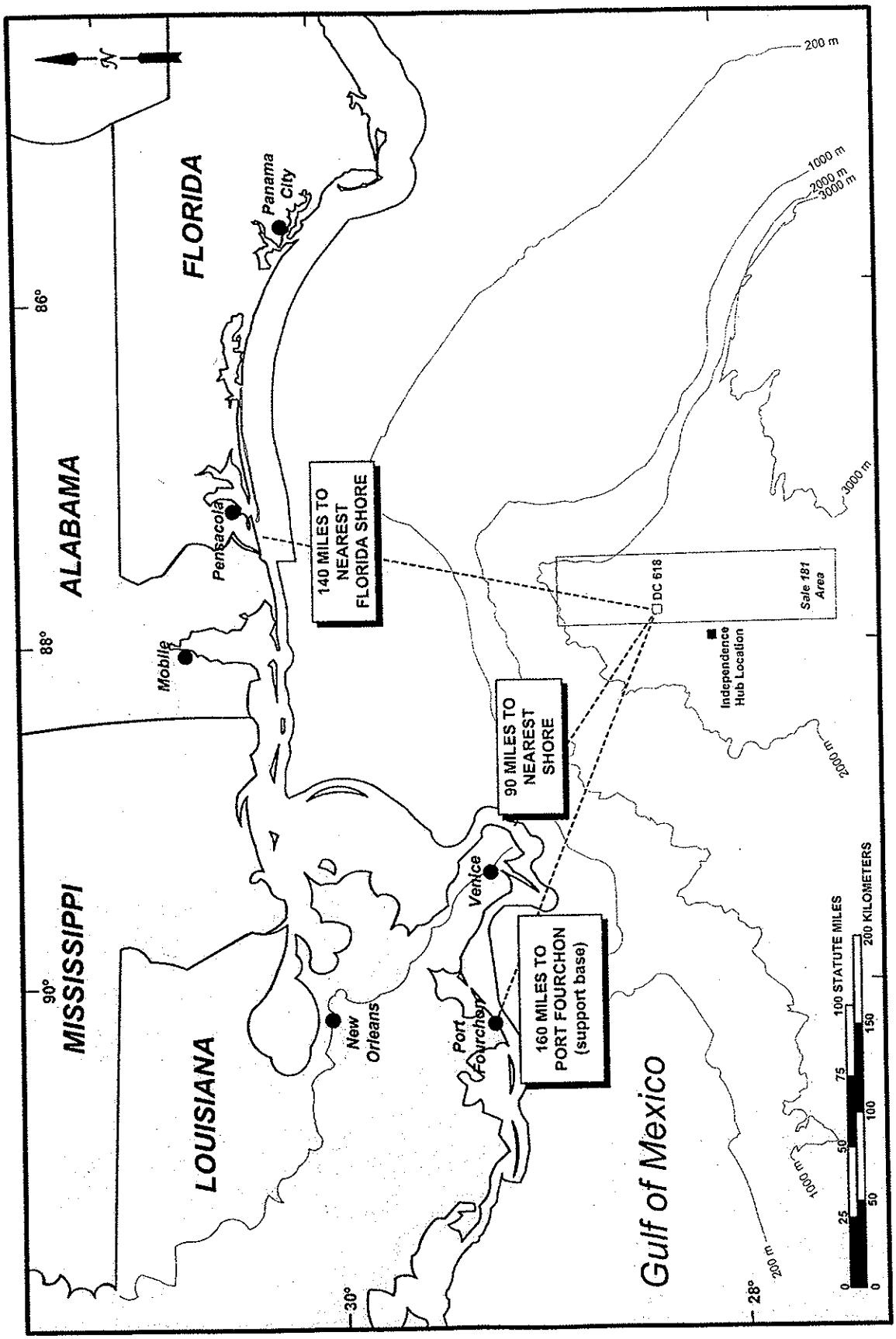
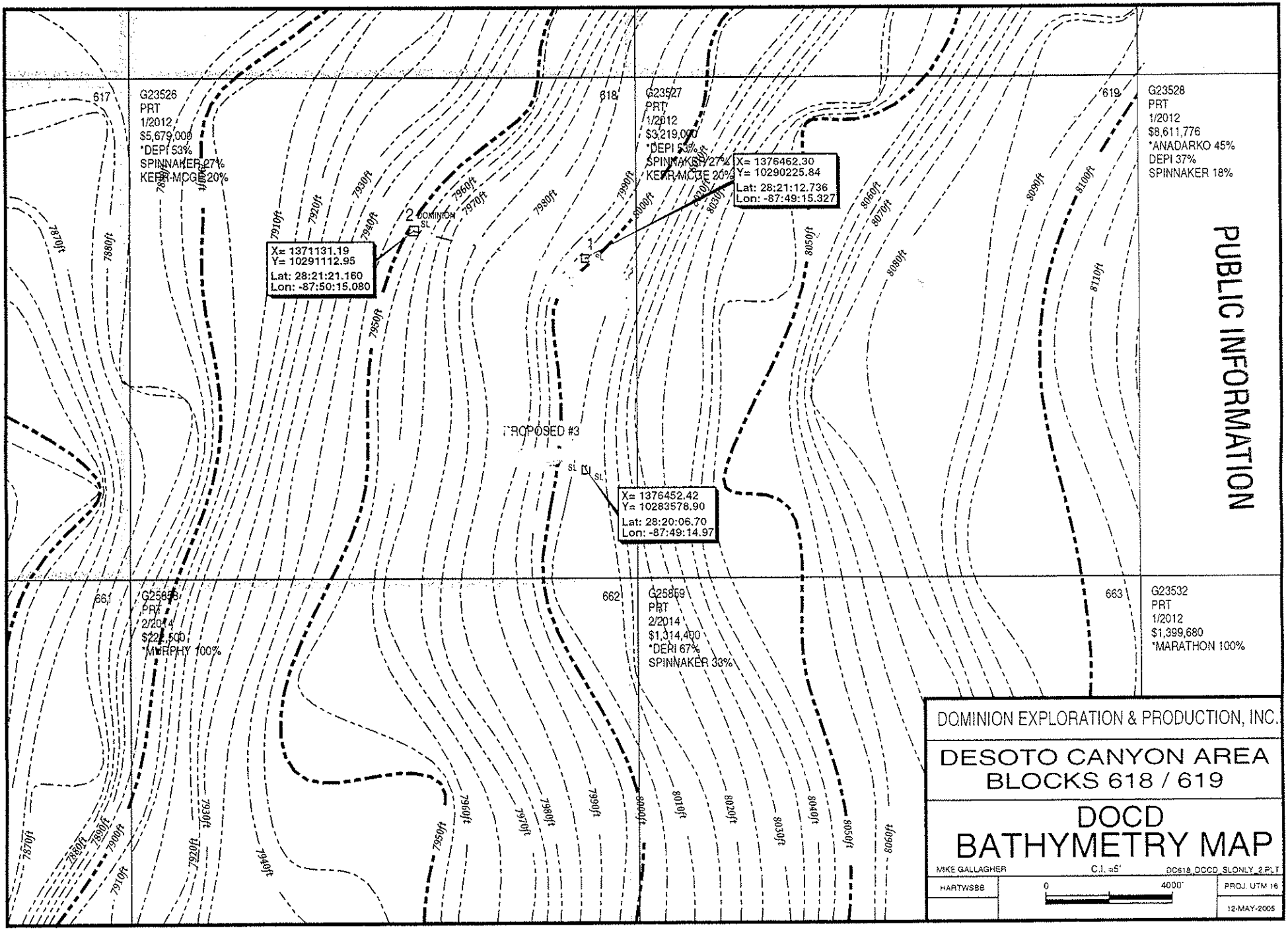
4000'
PROJ. UTM 16
12-MAY-2005



Location of DeSoto Canyon Block 618.


617
G23526
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SPINNAKER 27%
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Lon: -87:49:15.327
X= 1376452.42
Y= 10283578.90
Lat: 28:20:06.70
Lon: -87:49:14.97
PROPOSED #3
DOMINION
SL
661
G25858
PRT
2/2014
$221,500
*MURPHY 100%
662
G25859
PRT
2/2014
$1,314,400
*DERI 67%
SPINNAKER 33%
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G23532
PRT
1/2012
$1,399,680
*MARATHON 100%
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7910ft
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7930ft
7940ft
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8020ft
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8040ft
8050ft
8060ft
8070ft
8080ft
8090ft
8100ft
8110ft
DOMINION EXPLORATION & PRODUCTION, INC.
DESOTO CANYON AREA
BLOCKS 618 / 619
DOCD
BATHYMETRY MAP
MIKE GALLAGHER
C.I. =5'
DC618_DOCD_SLONLY_2.PLT
HARTWS88
0
4000'
PROJ: UTM 16
12-MAY-2005

PUBLIC INFORMATION

LOCATION TABLE

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #01			Subsea Completion
Anchor Radius (if applicable) in feet: N/A			Yes X / No
	Surface Location	**Bottom-Hole Location (For Wells)**	
Lease No.	OCS 23526	OCS	
Area Name	Desoto Canyon		
Block No.	618		
Blockline Departures (in feet)	N/S Departure: 5,774.16 F N L	N/S Departure: F___ L	
	E/W Departure: 1,617.70 F E L	E/W Departure: F L	
Lambert X-Y coordinates	X: 1,376,462.30	X:	
	Y: 10,290,225.84	Y:	
Latitude/ Longitude	Latitude 28° 21' 12.736" N	Latitude	
	Longitude -87° 49' 15.327" W	Longitude	
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 7,847'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

PUBLIC INFORMATION

LOCATION TABLE

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #02		Subsea Completion	
Anchor Radius (if applicable) in feet: N/A		Yes X	No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS 23526	OCS
Area Name	Desoto Canyon	
Block No.	618	
Blockline Departures (in feet)	N/S Departure: F N L 4,887.05	N/S Departure: F___ L
	E/W Departure: 6,948.81 F E L	E/W Departure: F L
Lambert X-Y coordinates	X: 1,371,131.19	X:
	Y: 10,291,112.95	Y:
Latitude/ Longitude	Latitude 28° 21' 21.160" N	Latitude
	Longitude -87° 50' 15.080" W	Longitude
	TVD (Feet):	MD (Feet): Water Depth (Feet): 7,847'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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LOCATION TABLE

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #03 (Location B)		Subsea Completion	
Anchor Radius (if applicable) in feet: N/A		Yes X	No
	Surface Location	**Bottom-Hole Location (For Wells)**	
Lease No.	OCS 23526	OCS	
Area Name	Desoto Canyon		
Block No.	618		
Blockline Departures (in feet)	N/S Departure: 3419 F S L	N/S Departure: F___ L	
	E/W Departure: 1628 F E L	E/W Departure: F L	
Lambert X-Y coordinates	X: 1,376,452.42	X:	
	Y: 10,283,578.90	Y:	
Latitude/ Longitude	Latitude 28° 21' 21.160" N	Latitude	
	Longitude -87° 50' 15.080" W	Longitude	
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 7,850'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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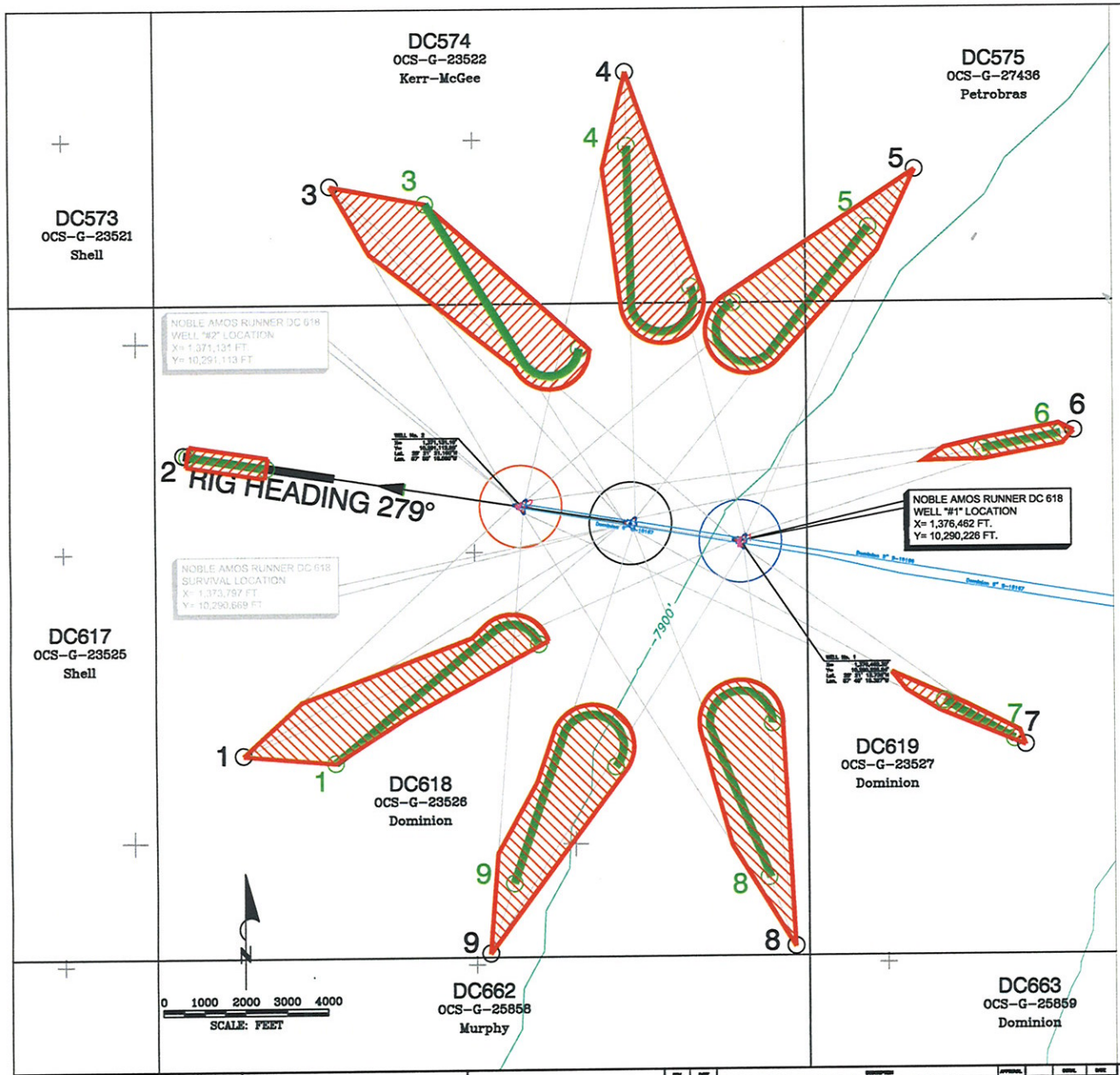

LEGEND

IMPACT GROUNDED LENGTH AREA

INSERT PATTERN

ANCHOR COORDINATES		
LINE #	X LOCATION (FT.)	Y LOCATION (FT.)
1	1,364,351	10,285,108
2	1,362,936	10,292,391
3	1,366,533	10,298,880
4	1,373,726	10,301,639
5	1,380,739	10,299,221
6	1,384,562	10,292,863
7	1,383,355	10,285,255
8	1,377,754	10,280,390
9	1,370,336	10,280,258

PRESET PATTERN

ANCHOR COORDINATES		
LINE #	X LOCATION (FT.)	Y LOCATION (FT.)
1	1,366,594	10,284,919
2	1,363,035	10,292,375
3	1,368,844	10,298,443
4	1,373,757	10,299,839
5	1,379,607	10,297,822
6	1,384,244	10,292,801
7	1,383,088	10,285,402
8	1,377,109	10,282,070
9	1,370,922	10,281,960

PRESET PATTERN

PRESET COMPONENT LAYING ON BOTTOM	
LINE #	LENGTH (FT.)
1	6,335
2	1,940
3	6,335
4	6,335
5	6,335
6	1,940
7	1,940
8	6,335
9	6,335

Dominion Exploration & Production, Inc.

FUGRO CHANCE INC.

NO.	DATE	DESCRIPTION	APPROVED
1	7-09-05	PROPOSED PIPELINES ADDED TO BASE MAP	R.C.T.
2	9-01-05	COMPONENT LAYING ON BOTTOM ADDED	E.Z.

DOMINION BLOCK DC618
WELL#1,#2 & SURVIVAL LOC.
AMOS RUNNER PRESET & RIG SYSTEM
GROUNDED LENGTH & IMPACT AREAS

DELMAR SYSTEMS, INC.

SIZE E | SCALE 1"=1,000FT | SHEET 1 OF 1 | DWG# 3444-SP-02 | JOB# 3444 | REV 2

PUBLIC INFORMATION

PUBLIC INFORMATION

Appendix B
General Information

(A) **Contact:** The following person(s) should be contacted pertaining to questions and/or additional data requirements.

Kathy Gowland
Regulatory Specialist
Phone: (504) 593-7152
Fax: (504) 593-7452
E-mail: Kathy_R_Gowland@dom.com

Michael Gallagher
Project Geologist
Phone: (504) 593-7480

(B) ***Prospect Name:***
Development Operations Coordination Document (Initial)
San Jacinto/Independence Hub Prospect
DeSoto Canyon Block 618, OCS-G-23526
Wells #1, #2 and #3

(C) **Production rates and life of reserves:**

(D) **New or Unusual Technology:** The proposed activities will be carried out and completed with the guarantee of the following items:

1) The most reliable and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems.
2) All operations will be covered by the Dominion Exploration & Production, Inc. Sub Regional Oil Spill Response Plan (OSRP) which was submitted on September 4, 2003, and approved by MMS on September 18, 2003. Amendments to this plan were submitted to MMS on March 31, 2005. Activities proposed under this Development Plan will be covered by the Sub Regional OSRP. This OSRP is the guide, which Dominion would follow in case of an oil spill. This plan is available upon request.
3) All applicable Federal, State and local permit requirements regarding air emissions, water quality and discharges for the proposed activities, as well as any other permit conditions, will be complied with.
4) ***Statement:*** No new or unusual technologies will be used in this project.

Appendix B
General Information (Continued)

(E) **Bonding Information:** Dominion Exploration & Production, Inc. operations outlined under this development document are covered under our $3,000,000 Area Wide Bond No. 76S63050327, provided in accordance with 30 CFR 256.61. Acknowledgment of receipt of the above issued by Minerals Management Service in letter dated June 20, 2000.

(F) **Onshore base and support vessels:**

The onshore support base for development activities at DeSoto Canyon Block 618 will be located in Fourchon, Louisiana. DeSoto Canyon Block 618 is located approximately 160 statute miles southeast of the Fourchon shore base.

1. Dominion Exploration & Production, Inc. maintains shore bases at Cameron and temporary shore bases at Fourchon and Venice, Louisiana. The Fourchon facility will be utilized for operations at DeSoto Canyon Block 618. The shore base consists of an office, dispatchers, dock facilities and dock services, which are manned 24 hours a day.

2. Helicopters, crew boats, supply boats and utility boats will be utilized to transport personnel and supplies to proposed locations at DeSoto Canyon 618. It is anticipated, the following will be utilized for transporting supplies and personnel.

   - Crew boat – 105' in size with 1500 hp capacity. Estimate 5 round trips per week during completion phase (91 day duration). Estimate 3 round trips per week during pipeline installation phase (14 day duration).
   - Supply boat – 220' in size with 3000 hp capacity. Estimate 4 round trips per week during completion phase.
   - Bell 407 or Sikorsky S-76 – Estimate 4 round trips per week during completion phase and 2 round trips per week during pipeline installation phase.

The route utilized by each mode of transportation will normally be in a straight line from the shore base in Fourchon to DeSoto Canyon Block 618.

(G) **Lease Stipulations:** Lease OCS-G-23526, DeSoto Canyon Block 618 was awarded to Dominion E&P on February 1, 2002 (effective date) for a period of 10 years. The lease contains the following stipulations:

Military Warning Area – Lease Stipulation No. 1

Appendix B
General Information (Continued)

Dominion Exploration & Production, Inc. will contact Eglin Air Force Base to notify them of our presence in the area and of our schedule. Dominion Exploration & Production, Inc. agrees to the following conditions:

1. Hold & Save Harmless – release U.S. Government from liability
2. Electromagnetic emissions – curtail emissions in some areas
3. Operational – determine is operational agreement is necessary

Evacuation – Lease Stipulation No. 2

In the event military operations necessitate, Dominion Exploration & Production, Inc. will evacuate the area in order not to interfere with potentially hazardous military operations.

Coordination – Lease Stipulation No. 3

If necessary, Dominion Exploration & Production, Inc. will enter into a formal Operating Agreement with command headquarters to specify the operating area for this project.

Marine Protected Species – Lease Stipulation No. 4

Dominion Exploration & Production, Inc. will take every measure possible to ensure that there is no loss of life or injury to any protected marine species.

Special Conditions

DeSoto Canyon 618 is located within the boundaries of Offshore Pascagoula No. 2 Lightering Zone. This is an area designated by the U. S. Coast Guard for the purpose of oil transfer for single hulled tankers. Dominion Exploration & Production, Inc. will notify all our contractors with marine transportation vessels when any vessels are in the area performing oil transfer operations in order to coordinate traffic patterns around the offload operation.

(H) Related OCS Facilities and operations:

Gas production from the San Jacinto field will be processed through an Independence Floating Production System (FPS), operated by Anadarko, designed to process 850 mmscfd of gas, up to 4,250 bpd of condensate, and a minimum of 3,000 bpd of water. The FPS is comprised of a semi-submersible floating vessel permanently anchored on location by mooring lines capable of

Appendix B
General Information (Continued)

operation and survival in extreme Gulf of Mexico weather conditions. The FPS will be located at Mississippi Canyon Block 920.

Seven (7) lease term pipelines will transport gas full well stream from the subsea wellheads to subsea manifolds. The production will then be transported via two right-of-way pipelines (8" and 8" x 10") approximately 25 miles in length to the floating production system (FPS). These pipelines are designed to transport a maximum of 500 MMCFD per day. Actual production rates over the life of the reservoir are estimated to range from 140 to 180 MMCFD. Shut-in time for the subsurface valve at the wellhead is 45 seconds. Shut-in time for the board valve is 45 seconds.

An electro-hydraulic steel tube (super duplex) umbilical, used to control and monitor the subsea facilities, will connect the subsea facilities to a Master Control Station on the Independence Hub in MC Block 920. The main umbilical will end in a subsea termination assembly adjacent to the manifold location. From there, in-field umbilicals will connect to the in-field termination assemblies at the well locations.

The 8" and 8" x 10" pipelines and the associated control umbilicals will be permitted as right-of-way pipelines. Chemicals which will be pumped through the umbilicals include: MEG - mono-ethylene glycol, MeOH – methanol, Corrosion Inhibitor (03VD042), Scale Inhibitor (EC6085A), Paraffin Inhibitor (EC6530A), and Paraffin Dispersant (EC6002A).

(I) Transportation Information:

The recombined gas and condensate will depart MC 920 Hub platform via a 20" pipeline, approximately 140 miles in length, and travel to a proposed valve platform located at West Delta Block 68.

Hydrocarbons will depart the West Delta Block 68 platform via a proposed 20" and 24" pipeline, respectively, to be installed by Tennessee Gas Pipeline. MMS approved the applications for both lines on March 29, 2005.

The 24" pipeline (segment number 15034) will terminate at a subsea tie-in on an existing Tennessee Gas line in Grand Isle Block 32, and be transported to an existing platform in Louisiana state waters. The 20" line (segment number 15033) will travel to the federal/state boundary line in West Delta Block 16 and continue to the aforementioned platform in Louisiana state waters.

Appendix B
General Information (Continued)

Production will depart the existing platform in Louisiana state waters via a common line that terminates at Tennessee's onshore compression/separation/storage facility located at Port Sulphur, Louisiana.

Attachments to Appendix B: None.

Appendix C
Geological, Geophysical and H_2S Information

Geological and Geophysical Information

(A) Structure Contour Maps:
- Attachment

(B) Interpreted 2- D and/or 3-D seismic lines:
- Previously provided and locations approved in Exploration Plan

(C) Geological structure cross-sections:
- Attachment

(D) Shallow hazards reports:
Fugro Geo Services, Inc. was contracted to prepare a hazard survey of the seafloor and potential for shallow water flow analyses for the general area of DeSoto Canyon Block 618 including the well locations proposed in this plan. An archeological report was also prepared as part of this hazard survey report.

(E) Shallow hazards assessment:
No new wells will be drilled and all surface locations have been previously approved in the Exploration Plan.

Should you have any questions, please call Mike Gallagher, Geologist, Dominion Exploration & Production, Inc. at (504) 593-7480.

(F) High-resolution seismic lines:
See attached

Hydrogen Sulfide (H_2S) Information

(A) Classification: By letter dated July 28, 2004, MMS determined DeSoto Canyon Block 618 in accordance with 30 CRR 250.417 C, be classified as "H_2S absent". (See Attachment)

(B) H2S Contingency Plan: Not Applicable.

Attachments to Appendix C:

Structure Contour Plats *(Proprietary)*
Geologic Cross-Section *(Proprietary)*
Seismic Line 1 and Line 2
H_2S Classification Letter

PUBLIC INFORMATION

EP FILE
GOV APPROVALS FILE
ERIC ZIMMERMAN
ROBERT HO
NELDA DECKER
MARGARET GALLATY
KATHY GOWLAND
7/30/04

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

In Reply Refer To: MS 5231

July 28, 2004

Ms. Kathy R. Gowland
Dominion Exploration & Production, Inc
1450 Poydras Street
New Orleans, Louisiana 70112-6000

Dear Ms Gowland:

Reference is made to the following plan

Control No.	R-04049
Type	Revised Exploration Plan
Received	June 17, 2004
Lease(s)	OCS-G 23526, Block 618, Desoto Canyon Area

You are hereby notified that the approval of the subject plan has been granted as of July 26, 2004, in accordance with 30 CFR 250.203(i)(1).

This approval includes the activities proposed for Well C.

Exercise caution while drilling due to indications of possible water flow.

In response to the request accompanying your plan for a hydrogen sulfide (H_2S) classification, the area in which the proposed drilling operations are to be conducted is hereby classified, in accordance with 30 CFR 250.490(c), as "H_2S absent."

If you have any questions or comments concerning this approval, please contact Michelle Griffitt at (504) 736-2975.

Sincerely,

for Donald C. Howard
Regional Supervisor
Field Operations

Appendix D
Biological and Physical Information

Chemosynthetic Information

Statement: The water depth at the DeSoto Canyon Block 618 locations is 7,675' – 7,865'. No hydrocarbon macro-seepage features or potential hard ground areas capable of supporting chemosynthetic communities are identified in the DeSoto Canyon 618 block. Dominion E&P plans to utilize a moored semi-submersible rig, however, there will be no associated anchors within 1,500' of any known chemosynthetic community.

Topographic Features Information

Statement: There are no identified biologically sensitive features in the immediate vicinity of DeSoto Canyon 618 project area.

Live Bottom (Pinnacle Trend) Information

Statement: There are no identified pinnacle features in the immediate vicinity of DeSoto Canyon 618.

Live Bottoms Report

Statement: There are no pinnacle trends or live bottoms within this project area.

Remotely Operated Vehicle (ROV) Surveys

1. Dominion Exploration & Production, Inc. is familiar with the ROV survey and reporting provisions of NTL 2003-G03.
2. Dominion Exploration & Production, Inc. will, if required, conduct surveys immediately prior to commencing completion operations on Well #1 approximately April 1, 2006, following the completion of operations on Well #2 and proposed Well #3 approximately 60 days later. Dominion Exploration & Production, Inc. will use the rig based ROV equipped with video imaging capabilities. The survey pattern will consist of six transects centered on the well locations (#1, #2 & #3) with tracks extending approximately 100 meters away from the wells on bearing of 30°, 90°, 150°, 210°, 270° and 330°. The seafloor will be videotaped continuously along each track.
3. Dominion Exploration & Production, Inc. will make biological and physical observations as described in NTL 2003-G03 and Form MMS-141 prior to commencing completion operations and also following the operations but prior to moving the rig off location. The observations will be documented using Form MMS-

Appendix D
Biological and Physical Information (continued)

141 or a facsimile and submitted to the MMS within 60 days after the second survey is completed.

Archaeological Information

Statement: This area has not been identified as a high probability shipwreck area, therefore, no archaeological information is required.

Attachments to Appendix D: None

Appendix E
Waste and Discharges Information

	TOTAL DAYS	BBLS
DECK DRAINAGE	95	47,500
WASH WATER	95	4,750
SANITARY WASTE	95	4,750
FOOD SOLIDS	95	95

A. Deck Drainage

1. Quantity of Discharges:

   Rain - 95 day estimate 47,500 bbls
   Wash Water - 95 day estimate 4,750 bbls

2. Discharge Rate

   Rain - 0-500 bbls/day
   Wash water - 40-60 bbls/day

3. Composition

   - Deck drainage will consist of primarily of water, soaps and deck soils.

4. Basis for Determination of Quantity and Discharge Rate

   - Rain Estimate - Wash water volumes used on other rigs.

5. Plans for Treatment Storage Transportation

   -Deck drainage with oil will be routed to a sump prior to discharge.

6. -Discharged overboard in DeSoto Canyon Block 618

B. Sanitary and Domestic Waste

1. Quantity of Discharge

Appendix E
Waste and Discharges Information (Continued)

Sanitary waste and domestic wash water: 95 days – 4,750 bbls
Food Solids: 95 days – 95 bbls

2. Discharge Rate

- Sanitary waste and domestic wash water - 50 bbls/day
- Food solids - 1 bbl/day

3. Composition of Discharges

- Sanitary waste and domestic wash water is composed of sanitary waste and shower and sink water.
- Food solids consist of leftover food scraps.

4. Basis For Determination of Quantity and Rate of Discharge

- Sanitary waste and domestic wash water from Red Fox Unit treatment capacity .5 to 1.2 bbls/man/day. Assume 50 men 1 bbl/day.
- Food solids are estimated at 1 bbl/day.

5. Plans for Treatment Storage Transportation and Disposal

- Sanitary waste and domestic wash water will be processed through U. S. Coast Guard approved sanitary waste treatment unit prior to discharge.

- Food solids will be segregated from metals, paper and plastic prior to discharge.
- Food solids will be comminuted in accordance with 33 CFR

6. Sanitary and domestic waste will be discharged overboard in DeSoto Canyon Block 618 after treatment.

C. General Trash and Used Engine Oil

1. Quantity of Discharges - Not Applicable

2. Discharge Rate - Not Applicable

3. Composition of Discharges - Not Applicable

Appendix E
Waste and Discharges Information (Continued)

4. Basis for Determination of Quantity of Discharge - Not Applicable

5. Plans for Treatment Storage Transportation and Disposal

   General trash is compacted containerized and brought to shore for disposal at a municipal facility.

   Used engine oil is containerized in a U. S. Coast Guard approved container, brought to shore and picked up by an oil re-claimer.

6. Used engine oil will be boxed in containers, sent to shore base via boat and trucked to ETT for disposal.

Attachments to Appendix E:

- Waste and Discharges Information

PUBLIC INFORMATION

DEEPWATER DP SEMI
WASTES & DISCHARGES INFORMATION

Discharge Table

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate		Treatment and/or Storage, Discharge Location and Method
Water-based drilling fluids	N/A			If applicable, will be discharged overboard
Drill cuttings associated with water-based fluids	N/A			If applicable, will be discharged overboard
Drill cuttings associated with synthetic drilling fluids	N/A			If applicable, cuttings will be discharged overboard
Muds, cuttings and cement at the seafloor	N/A			If applicable, cuttings will be discharged overboard
Produced water	N/A			
Deck Drainage Rain Wash Water	0 - 500 bbls/day-Dependent upon rainfall 50 bbls/day			Discharged overboard in Block DC 618 -- Deck drainage with oil will be routed to a sump prior to discharge
Well treatment, workover or completion fluids	N/A	200 bbls/well/every 4 years		If applicable, used fluids will be discharged overboard & returned excess to shore for credit
Uncontaminated fresh or seawater				If applicable, will be discharged overboard
Misc. discharges (permitted under NPDES) (Excess cement with cementing chemicals)	N/A			If applicable, will be discharged overboard
Supplied by Service Company				
Sanitary Waste (Black Water)	54 bbls/day	400 bbls/hr		Hamworthy ST-30
Domestic Waste (Gray Water)	14,700 gal/day	N/A		Remove floating solids & discharge
Desalinization Unit Water	3500 bbls/day	N/A		Discharge overboard
Uncontaminated Bilge Water	34 bbls	260 cu meters/hr		Discharge overboard
Uncontaminated Ballast Water	3682 bbls	2600 cu meters/hr		Discharge overboard
BOP Control Fluids	12 gals/day			Discharged overboard

Discharge Table

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate		Treatment and/or Storage, Discharge Location and Method
Misc. discharges to which treatment chemicals have been added.	None reported			

Disposal Table

Type of Waste Approximate Composition	Amount	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Spent oil-based drilling fluids and cuttings	N/A		Environmental Treatment Team - Morgan City, La. or Newpark - Fouchon, La.	If applicable, transport to shore for disposal at waste disposal facility
Spent synthetic-based drilling fluids and cuttings	N/A		Environmental Treatment Team - Morgan City, LA or Newpark - Fouchon, La.	If applicable, transport to shore for disposal at waste disposal facility
Oil-contaminated produced sand	N/A		Environmental Treatment Team - Morgan City, La. or Newpark - Fouchon, La.	If applicable, transport to shore for disposal at waste disposal facility
Produced water	N/A			
Norm - contaminated wastes	N/A			If applicable, transport to a transfer station via dedicated barge
Chemical product wastes	N/A			If applicable, transport to shore location
Workover fluids	N/A			If applicable, transport on crew boat or barge to supplier
Supplied by Service Company				
Waste Oil	1310 bbls/yr		Environmental Treatment Team - Morgan City, La.	Store in drums or totes and send to onshore disposal/recycling facility
Trash and Debris	17 cu ft		Environmental Treatment Team - Morgan City, La.	Transfer in storage containers on boat to a landfill/municipal facility

Appendix F
Oil Spill Response and Chemical Information

A. ***Reference*** – Regional Oil Spill Response Plan. A site specific oil spill response plan is not required for this area.

The Dominion Exploration & Production, Inc. Sub Regional Oil Spill Response Plan (OSRP) was submitted on September 9, 2003, with additional information submitted on September 18, 2003. An amendment to the plan was submitted to MMS on March 31, 2005. The plan is available upon request.

Statement - Activities proposed, under this development document will be covered by the Sub Regional OSRP. Operations under this development document for DeSoto Canyon 618 will not exceed the Worst Case Discharge (WCD) of 2,000 bbls as stated in our Sub Regional Oil Spill Response Plan (OSRP).

B. Should an oil spill occur while operating on OCS-G-23526 Lease, DeSoto Canyon Block 618, action will be initiated immediately by the Dominion E&P Spill Response Team and The Clean Gulf Associates. Clean Gulf Associates maintains facilities and equipment at Intracoastal City, Venice, Grand Isle and Cameron, Louisiana. Texas facilities are at Galveston, Port Aransas, and Texas City. A description of oil spill response equipment and materials is listed in the Clean Gulf Associates Manual, Volume I Section III. Primary spill response equipment will be deployed from Clean Gulf Associates facility at Venice, Louisiana. Preplanned staging area is Dominion E&P shore base at Venice, Louisiana.

C. Regional OSRP Comparison.

Category	Sub Regional OSRP	DOCD
Type of Activity	Development/Mobile Rig	Development/Mobile Rig
Spill Location (area/block)	DeSoto Canyon Blk. 618	DeSoto Canyon 618
Facility Designation	Well Locs 1 & 2	Well Locs 1, 2 & 3
Distance to Nearest Shoreline	90 miles	90 miles
Storage Tanks (total)		
Flowlines (on facility)		
Lease term pipelines		1 bbl
Uncontrolled blowout (volume per day)		
Total Volume	2,000	2,000
Type of Oil	Condensate	Condensate
API Gravity	35^0	35^0

Appendix F
Oil Spill Response and Chemical Information (continued)

Statement: Since Dominion Exploration & Production, Inc. has the capability to respond to the worst-case spill scenario included in its sub regional OSRP submitted on September 9, 2003 and amended on March 31, 2005 and since the worst-case scenario determined for our development document does not replace the worst-case scenario in our sub regional OSRP, I hereby certify that Dominion Exploration & Production, Inc. has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our development document.

A. Facility tanks, production vessels.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Bulk Tanks – Fuel oil tanks	Semi-submersible	4,451	3	11,649	7.62

B. Spill response sites.

Primary Response Equipment Location	Preplanned Staging Location(s)
Clean Gulf Associates - Venice, Louisiana	Clean Gulf Associates – at Intracoastal City, Venice, Grand Isle and Cameron, Louisiana Galveston, Ingleside and Houston, Texas

C. Diesel oil supply vessels.

Size of Fuel Supply Vessel	Capacity of Fuel Supply Vessel	Frequency of Fuel Transfers	Route Fuel Supply Vesssel Will Take
Escort – 240' Ranger – 240'	185,000 gals 309,000 gals	bi-weekly	From the shorebase at Fourchon to DC 618

D. Support vessels fuel tanks.

Type of Vessel	Number in field simultaneously	Estimated maximum fuel tank storage capacity
Crew Boat – Gulf Vision – 155'	**1**	**35,000 gals**

E. Produced liquid hydrocarbons transportation vessels.

Dominion will not be transporting any produced liquid hydrocarbons via vessels.

Appendix F
Oil Spill Response and Chemical Information (Continued)

F. Oil & synthetic based drilling fluids

Type of Drilling Fluid	Estimated Volume of Mud Used Per Well	Mud Disposal Method	Estimated Volume of Cuttings Generated per Well	Cuttings Disposal Method
N/A				

G. Oil characteristics.

The oil characteristics are listed in Appendix H of Dominion Exploration & Production, Inc. 's sub regional oil spill plan on file with Minerals Management Service.

H. Blowout scenario.

A full blowout scenario is outlined in Appendix H of our Gulf of Mexico Sub Regional Oil Spill Response Manual.

Should a blowout occur, in most cases, the formations represented in the Gulf of Mexico will bridge over. If the wellhead and BOP system is still functional, wellbore relief should be possible within 10 days. In a relief scenario, a rig will have to be contracted and the time to drill the relief well should take approximately 30 to 60 days depending on the depth required to traverse the original wellbore.

I. Spill response discussion for NEPA analysis.

Our spill response will utilize Clean Gulf Associates' fast response equipment in the event of a spill. Our response times will be as stated in our Oil Spill Response Plan (See attached response time table). Our worst case discharge will be 2,000 BOPD (condensate) at 35°.

J. Pollution prevention measures.

Dominion's commitment to safety and the environment is to have no accidents, injuries, unsafe work practices, or unsafe conditions throughout our operations.

On-site personnel perform daily visual sheen observations and are instructed to identify and shut-off the source and make immediate notifications of the incident.

Appendix F
Oil Spill Response and Chemical Information (Continued)

K. Flower Garden Banks National Marine Sanctuary Monitoring Plans.

Not applicable.

Attachments to Appendix F:

Equipment Response Time to DC 618 Table

WCD Scenario > 10 Miles From Shore (90 miles from shore)
DeSoto Canyon 618
2,000 bbls of condensate , API gravity 35°

H.3 – Equipment Response Time to: DeSoto Canyon 618

	EQUIPMENT TYPE	Derated Capacity (BBLS)	Storage (BBLS)	No. of Units	Owner/ Location	Initial Staging	Hours To Staging Area	TOTAL Time to Procure (1)	Time to Load Out (2)	Travel Time (Staging/ Spill) (3)	Time to Deploy (4)	TOTAL Estimated Response Time
A	DC 4 Spray Aircraft	--	--	1	ASI/HOUMA	HOUMA	0					
	Spotter Plane	--	--	1	ASI/HOUMA	HOUMA	0					
	Spotter Personnel	--	--	2	ASI/HOUMA	HOUMA	1					
	Dispersant	--	--		CGA/HOUMA	HOUMA	0	1	1	1.5	0	3.5
B	HOSS Barge	43,000	4,130	1	CGA/HOUMA	HOUMA	1					
	Operator	--	--	12	STARS*	HOUMA	2					
	Tugs	--	--	3	CENAC/HOUMA	HOUMA	4	4	2	33	1	40
C	FRU/Expandi	6,800	400	2	CGA/FORT JACKSON	VENICE	.5					
	Operators	--	--	12	STARS*	VENICE	2					
	Utility Boat	--	--	2	Vessel of Opp.	VENICE	2					
	Crew Boat	--	--	2	Vessel of Opp.	VENICE	2	2	1	8.5	1	12.5
D	FRU/Expandi	3,400	200	1	CGA/PASCAGOULA	PASCAGOULA	.5					
	Operators	--	--	6	STARS*	PASCAGOULA	2					
	Utility Boat	--	--	1	Vessel of Opp.	PASCAGOULA	2					
	Crew Boat	--	--	1	Vessel of Opp.	PASCAGOULA	2	2	1	10.5	1	14.5
E	Grand Bay Response Vessel	5,000	65	1	CGA/FT. JACKSON	VENICE	.5					
	Operators	--	--	3	STARS*	VENICE	2	2	.5	4.5	1	8
F	INITIAL SUPPORT											
	Spotter Helo	--	--	1	PHI/VENICE	SPILL SITE	1	1	--	1	--	2
	Surveillance Helo	--	--	1	PHI/VENICE	SPILL SITE	1	1	--	1	--	2
	Hand Held Radios	--	--	30	STARS*	VENICE	1.5	1.5	--	1	--	2.5
	Ocean Barge	--	23,000	1	CENAC/HOUMA	HOUMA	4	4	1	29	1	35
	TOTAL	58,200	27,795									

*STARS contractor called out by MSRC

Appendix G
Air Emissions Information

An Air Quality Review (AQR) is required for this initial development document.

Attachments to Appendix G:

- Air Quality Screening Checklist

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. 1010-0049
OMB Approval Expires: August 31, 2006

COMPANY	Dominion Exploration & Production, Inc.
AREA	Desoto Canyon
BLOCK	618
LEASE	OCS-G-23526
PLATFORM	Subsea completions
WELL	#1 , #2, and #3
COMPANY CONTACT	Joan Elterman
TELEPHONE NO.	504-593-7465
REMARKS	DOCD (I) - MMS maximum emissions for a semisubmersible drilling rig

PUBLIC INFORMATION

Yes	No	Air Quality Screening Questions
	X	Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT=3400D2/3 for CO, and CT=33.3D for the other air pollutants (where D=distance to shore in miles)?
	X	Do your emission calculations include any emission reduction measures or modified emission factors?
	X	Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?
	X	Do you expect to encounter H2S at concentrations greater than 20 parts per million (ppm)?
	X	Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?
	X	Do you propose to burn produced hydrocarbon liquids?
	X	Are your proposed development and production activities located within 25 miles from shore?
X		Are our proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:

YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2006	1	14
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		

AIR EMISSION CUMPUTATION FACTORS

Fuel Usage Conversion Factors	Natural Gas Turbines		Natural Gas Engines		Diesel Recip. Engine		REF.	DATE
	SCF/hp-hr	9.524	SCF/hp-hr	7.143	GAL/hp-hr	0.0483	AP42 3.2-1	4/76 & 8/84

Equipment/Emission Factors	units	PM	SOx	NOx	VOC	CO	REF.	DATE
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-1& 3.1-1	10/96
NG 2-cycle lean	gms/hp-hr		0.00185	10.9	0.43	1.5	AP42 3.2-1	10/96
NG 4-cycle lean	gms/hp-hr		0.00185	11.8	0.72	1.6	AP42 3.2-1	10/96
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-1	10/96
Diesel Recip. < 600 hp.	gms/hp-hr	1	1.468	14	1.12	3.03	AP42 3.3-1	10/96
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	1.468	11	0.33	2.4	AP42 3.4-1	10/96
Diesel Boiler	lbs/bbl	0.084	2.42	0.84	0.008	0.21	AP42 1.3-12,14	9/98
NG Heaters/Boilers/Burners	lbs/mmscf	7.6	0.593	100	5.5	84	P42 1.4-1, 14-2, & 14	7/98
NG Flares	lbs/mmscf		0.593	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.83	2	0.01	0.21	AP42 1.3-1 & 1.3-3	9/98
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.0005		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.4	% weight
Produced Gas(Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

AIR EMISSION CALCULATIONS - FIRST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS
Dominion Exploration & P	Desoto Canyon	618	OCS-G-23526	ubsea completio	#1 , #2, and #3	Joan Elterman	504-593-7465	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
Completion	PRIME MOVER>600hp diesel	26400	1275.12	30602.88	24	91	18.61	85.36	639.65	19.19	139.56	20.32	93.22	698.50	20.95	152.40
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	1500	72.45	1738.80	6	65	1.06	4.85	36.34	1.09	7.93	0.21	0.95	7.09	0.21	1.55
	VESSELS>600hp diesel(supply)	3000	144.9	3477.60	8	39	2.11	9.70	72.69	2.18	15.86	0.33	1.51	11.34	0.34	2.47
	VESSELS>600hp diesel(tugs)	8400	405.72	9737.28	24	6	5.92	27.16	203.52	6.11	44.41	0.43	1.96	14.65	0.44	3.20
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	8800	425.04	10200.96	24	14	6.20	28.45	213.22	6.40	46.52	1.04	4.78	35.82	1.07	7.82
	SUPPORT VESSEL diesel	12000	579.6	13910.40	24	14	8.46	38.80	290.75	8.72	63.44	1.42	6.52	48.85	1.47	10.66
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	1500	72.45	1738.80	6	6	1.06	4.85	36.34	1.09	7.93	0.02	0.09	0.65	0.02	0.14
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	JACKUP BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fire Pump-RECIP. <600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (supply	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane-RECIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas(w/cat.)	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2006 YEAR TOTAL							43.42	199.18	1492.51	44.78	325.64	23.76	109.02	816.90	24.51	178.23
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											2997.00	2997.00	2997.00	2997.00	68282.16
	90.0															

Form MMS-139 (August 2003)

AIR EMISSIONS CALCULATIONS - SECOND YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT			PHONE	REMARKS					
Dominion Exploration & P	Desoto Canyon	618	OCS-G-23526	ubsea completio	#1 , #2, and #3		Joan Elterman			504-593-7465	#REF!					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
Completion	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	JACKUP BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fire Pump-RECIP. <600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (supply	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane-RECIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas (w/cat)	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2007	YEAR TOTAL						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											0.00	0.00	0.00	0.00	0.00
	0.0															

PUBLIC INFORMATION

AIR EMISSIONS CALCULATIONS - THIRD YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS
Dominion Exploration & P	Desoto Canyon	618	OCS-G-23526	ubsea completio	#1 , #2, and #3	Joan Elterman	504-593-7465	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
COMPLETION	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fire Pump-RECIP. <600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane-RECIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas (w/cat)	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	FLARE-		0		0	0				0.00					0.00	
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2008	YEAR TOTAL						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											0.00	0.00	0.00	0.00	0.00
	0.0															

PUBLIC INFORMATION

AIR EMISSIONS CALCULATIONS - FOURTH YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT				PHONE	REMARKS				
Dominion Exploration & F	Desoto Canyon	618	OCS-G-23526	ubsea completio	#1 , #2, and #3		Joan Elterman				504-593-7465	#REF!				
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fire Pump-RECIP. <600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane-RECIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas (w/cat)	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2009 YEAR TOTAL							0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											0.00	0.00	0.00	0.00	0.00
	0.0															

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
Dominion Exploration & P	Desoto Canyon	618	OCS-G-23526	ubsea completio	#1 , #2, and #3		Joan Elterman	504-593-7465	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
Completion	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fire Pump-RECIP. <600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel (supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane-RECIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas (w/cat)	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	FLARE-		0		0	0				0.00					0.00	
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			0.0		0				0.00					0.00	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2010	YEAR TOTAL						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											0.00	0.00	0.00	0.00	0.00
	0.0															

PUBLIC INFORMATION

AIR EMISSION CALCULATIONS

OMB Control No. 1010-0049
OMB Approval Expires: August 31, 2006

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Dominion Explor	Desoto Canyon	618	OCS-G-23526	Subsea completions	#1 , #2, and #3

Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2006	23.76	109.02	816.90	24.51	178.23
2007	0.00	0.00	0.00	0.00	0.00
2008	0.00	0.00	0.00	0.00	0.00
2009	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00
Allowable	2997.00	2997.00	2997.00	2997.00	68282.16

Appendix H
Environmental Impact Analysis (EIA)

In accordance with the requirements of 30 CFR 250.203(b), an Environmental Impact Analysis (EIA) is attached.

Attachments to Appendix H:

- Environmental Report

Environmental Impact Analysis

INITIAL DEVELOPMENT OPERATIONS
COORDINATION DOCUMENT
DeSoto Canyon Area
Block 618 (OCS-G 23526)

May 2005

Prepared for:

Dominion Exploration & Production, Inc.
1450 Poydras Street
New Orleans, Louisiana 70112
Telephone: (504) 593-7465

Prepared by:

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(continued)

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A. IMPACT-PRODUCING FACTORS

This Environmental Impact Analysis (EIA) evaluates development activities by Dominion Exploration & Production, Inc. (Dominion) in DeSoto Canyon (DC) Block 618 (San Jacinto prospect). Dominion plans to subsea complete and produce three wells – two previously drilled wells, DC 618 #1 and DC 618 #2, and one proposed well, DC 618 #3. Drilling of the proposed well will be conducted under the previously approved Exploration Plan. The subsea system will consist of the three producing wells tied into an 8-inch flowline spur that will run from DC 618 to the Spiderman (DC 620/621)/San Jacinto (DC 618) shared subsea system, a distance of approximately 1 mile. Jumpers will be installed to transport production from the wells to the flowline spur. This EIA covers impacts of completing the proposed wells and installing the flowline spur and jumpers.

Production from DC 618 will be transported by pipeline to a production manifold in DC 621 and from there to the proposed Independence Hub in Mississippi Canyon (MC) Block 920, a distance of approximately 32 miles. Approval for the Independence Hub has been applied for separately by Anadarko under a Development Operations Coordination Document (DOCD) for Atwater Valley (AT) Blocks 305 and 349. Installation of right-of-way pipelines will be permitted under separate pipeline applications. The Independence Hub and the right-of-way pipelines are discussed in this EIA for information only, as they are not part of the DOCD.

The general schedule is given in ***DOCD Appendix A***. Installation of the flowline spur and jumpers is planned for March 2006. Subsea completions of the wells are scheduled for April 2006 (DC 618 #1), May 2006 (DC 618 #2), and June 2006 (DC 618 #3). The wells are scheduled to be tied into the DC 620/621 pipeline on 1 August 2006, and production is planned to commence on 1 September 2007.

DC 618 is approximately 90 miles from the nearest coastline (Louisiana), 140 miles from Florida, and 160 miles from the onshore support base in Port Fourchon, Louisiana (**Figure 1**). Water depths in the lease range from about 2,339 to 2,397 m (7,675 to 7,865 ft). Water depths at the wellsites range from 2,385 to 2,393 m (7,825 to 7,850 ft). The Independence Hub location in MC 920 is in a water depth of about 2,438 m (8,000 ft), 90 miles southeast of the Louisiana coastline.

Table 1 is a matrix of impact-producing factors (IPFs) and potentially affected environmental resources. The table is based on the matrix provided by the Minerals Management Service (MMS) at *http://www.gomr.mms.gov/homepg/regulate/regs/ntls/EIAWorksheet.pdf.*

An "X" in a particular table cell indicates that an IPF could affect a certain resource, and a dash (--) indicates no impact or negligible impact. Where there may be an effect, an analysis is provided in **EIA Section B**. For completeness, an "X" has been placed in the Accidents column for various coastal and other resources indicating potential impact, even though the analysis indicates contact with spilled oil is unlikely. In accordance with MMS requirements, for those cells that are footnoted, a statement has been provided after the table as to the applicability of the proposed operations.

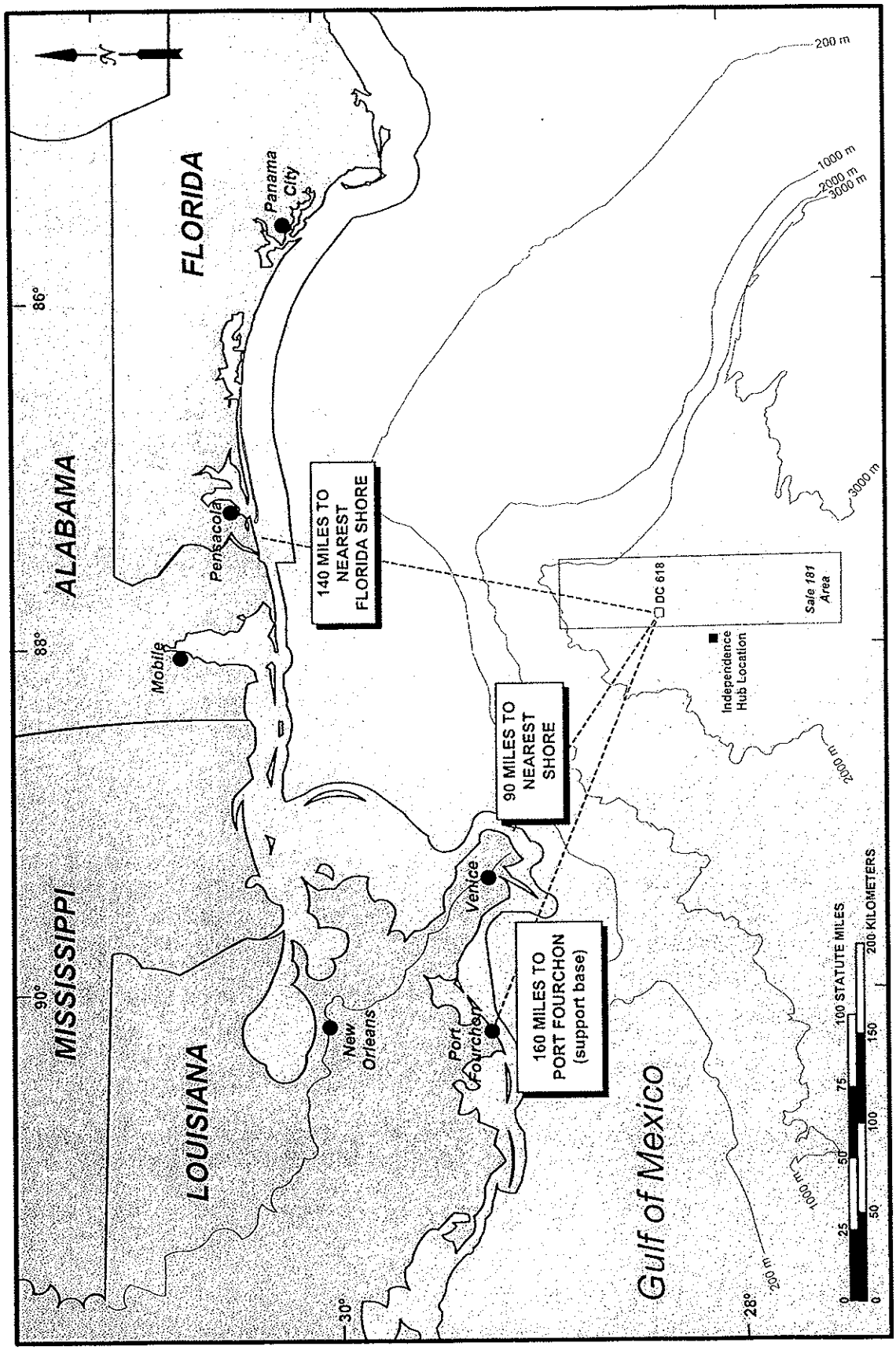

Figure 1. Location of DeSoto Canyon Block 618.

Table 1. Matrix of impact-producing factors and environmental resources.

Environmental Resources	Impact-Producing Factors						
	Physical Disturbances to the Seafloor	Presence of Structures	Air Emissions	Effluent Discharges	Marine Trash and Debris	Support Operations	Accidents
Site-Specific at Offshore Location							
Designated topographic features	--(1)	--	--	--(1)	--	--	--(1)
Pinnacle Trend area live bottoms	--(2)	--	--	--(2)	--	--	--(2)
Eastern Gulf live bottoms	--(3)	--	--	--(3)	--	--	--(3)
Chemosynthetic communities	--(4)	--	--	--	--	--	--
Water quality	--	--	--	X	--	X	X
Fisheries	--	X	--	--	--	--	X
Marine mammals	--	X(8)	--	--	X	X	X(8)
Sea turtles	--	X(8)	--	--	X	X	X(8)
Air quality	--	--	X(9)	--	--	X	X
Shipwreck sites (known/potential)	--(7)	--	--	--	--	--	--
Prehistoric archaeological sites	--(7)	--	--	--	--	--	--
Vicinity of Offshore Location							
Essential fish habitat	--	X	--	X	--	--	X(6)
Marine and pelagic birds	--	X	--	--	X	--	X
Public health and safety	--	--	--	--	--	--	--(5)
Coastal and Onshore							
Beaches	--	--	--	--	--	--	X(6)
Wetlands	--	--	--	--	--	--	X(6)
Shore birds & coastal nesting birds	--	--	--	--	--	X	X(6)
Coastal wildlife refuges	--	--	--	--	--	--	X(6)
Wilderness areas	--	--	--	--	--	--	X(6)
Other Resources							
Benthic communities	X	X	--	--	--	--	X
Pelagic communities	--	X	--	X	--	--	X
Offshore areas of concern	--	--	--	--	--	--	X
Gulf sturgeon (threatened fish)	--	--	--	--	--	--	X
Endangered beach mice and Florida salt marsh vole	--	--	--	--	--	--	X
Economics and demographics	--	--	--	--	--	--	--
Land use	--	--	--	--	--	--	--
Recreation and tourism	--	--	--	--	--	--	--
Public opinion	--	--	--	--	--	--	--
Coastal littoral processes	--	--	--	--	--	--	--
Navigation	--	--	--	--	--	--	--
Other uses of the area	--	--	--	--	--	--	--

Table Footnotes and Applicability:

(1) *Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the*
   (a) *4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;*
   (b) *1,000-m, 1-mile, or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features stipulation attached to an outer continental shelf (OCS) lease;*
   (c) *Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or*
   (d) *Proximity of any submarine bank (500-ft buffer zone) with relief greater than 2 m that is not protected by the Topographic Features stipulation attached to an OCS lease.*

- This footnote is not applicable. The lease area is not within or near the stated distances of any topographic feature or no-activity zone. The geohazards evaluation indicates no submarine banks in the lease areas.

(2) *Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) stipulation attached to an OCS lease.*

- The lease area is not covered by the Live Bottom (Pinnacle Trend) stipulation. The geohazards evaluation indicates no hard bottom features in the lease area.

(3) *Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) stipulation attached to an OCS lease.*

- The Live Bottom (Low-Relief) stipulation applies to Eastern Planning Area leases in water depths of 100 m or less; therefore, the lease area is not covered by this stipulation.

(4) *Activities on blocks designated by the MMS as being in water depths of 400 m or greater.*

- The lease area is located in water depths of 400 m or greater. However, the chemosynthetic community evaluation indicates that the potential for significant chemosynthetic communities is very low. No impacts on chemosynthetic communities are anticipated.

(5) *Exploration or production activities where H_2S concentrations greater than 500 ppm might be encountered.*

- This footnote is not applicable because MMS has determined DC 618 to be "H_2S absent."

(6) *All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.*

- Accidental hydrocarbon spills could affect the resources marked (X) in the matrix, and impacts are analyzed in **EIA Section B**. Due to the distance from shore, the anticipated spill weathering characteristics, and spill response measures, impacts on beaches, wetlands, shore birds and coastal nesting birds, and other coastal resources are considered highly unlikely.

(7) *All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the MMS as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or prehistoric site that no impact would occur, the EIA can note that in a sentence or two.*

- DC 618 is not on the MMS list of blocks determined to have a high probability of archaeological resources. Therefore, no impacts on archaeological resources are expected.

(8) *All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.*

- IPFs that may affect marine mammals, sea turtles, or their critical habitats include presence of structures, marine trash and debris, support operations, and accidents (oil spills). Impacts are analyzed in **EIA Section B**.

(9) *Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.*

- This footnote is not applicable (no transportation of produced fluids to shore using shuttle tankers or barges).

IPFs applicable to the proposed activity include physical disturbances to the seafloor, presence of structures, air emissions, effluent discharges, marine trash and debris, support operations, and accidents.

A.1 PHYSICAL DISTURBANCES TO THE SEAFLOOR

The wells will be completed with a moored semi-submersible, the Noble Amos Runner. Eight anchors will be deployed on the seafloor around the rig location.

Installation of subsea facilities in DC 618 will disturb the seafloor. Facilities to be installed include subsea well trees, umbilical termination assemblies, in-field flowlines and umbilicals, and jumpers. According to MMS (2003a), installation of subsea infrastructure will cause bottom sediment disturbance in an area of about 2 ha per producing well. This would result in a total disturbed area of about 6 ha for the three wells in DC 618.

Installation of facilities beyond the lease area (not part of this DOCD) will result in additional seafloor disturbance. A right-of-way pipeline will extend to a production manifold in DC 621, and from there, right-of-way pipelines will connect to the Independence Hub in MC 920. Total distance from the DC 618 wellsites to the Independence Hub is approximately 32 miles. A dynamically positioned (DP) lay barge would be used to install pipelines using the J-lay method, and therefore there would be no anchoring. The MMS (2001c) estimates that 0.32 ha of seafloor is disturbed per kilometer of deepwater pipeline installed. Assuming a pipeline length of approximately 51.5 km (32 miles), the total seafloor area disturbed would be about 16.5 ha. In MC 920, a small area of seafloor will also be disturbed by the suction pilings used to moor the Independence Hub. It is assumed that the total area of seafloor disturbance will be a few hectares.

A.2 PRESENCE OF STRUCTURES

A moored semi-submersible, the Noble Amos Runner, will be temporarily on site in DC 618 during completion operations. Seafloor structures that will remain in place in the lease area for the lifetime of the project include well trees, umbilical termination assemblies, in-field flowlines, and umbilicals and jumpers. Structures outside the lease area will include the Independence Hub in MC 920 and right-of-way pipelines connecting the lease area to the Independence Hub. The Independence Hub will be a column-based semisubmersible type hull structure that will be affixed to the seafloor by suction pilings.

In the upper water column, offshore structures will attract epipelagic fishes such as tunas, dolphin, billfishes, and jacks, which are commonly drawn to fixed and drifting surface structures (e.g., Holland et al., 1990; Higashi, 1994; Relini et al., 1994). At the seafloor, bottom-dwelling fishes and invertebrates may be attracted to the structure provided by subsea facilities, etc.

A.3 AIR EMISSIONS

DOCD Appendix G provides the Projected Air Quality Emissions Report prepared in accordance with MMS requirements. Included are drilling rig and support vessel emissions during completion operations and emissions from vessels (lay barge, tugs, support vessels) that will install lease-term pipelines in the lease area. The projected annual emissions are below the exemption levels, and therefore no further analysis is required. A separate air quality calculation for the installation and operation of the Independence Hub has been submitted to the MMS by Anadarko in the DOCD for AT 305/349.

A.4 EFFLUENT DISCHARGES

DOCD Appendix E summarizes wastes including quantities and methods of disposal. All offshore discharges will be in accordance with the National Pollutant Discharge Elimination System (NPDES) general permit issued by the U.S. Environmental Protection Agency (USEPA). Effluent discharges will include well completion fluids, sanitary and domestic wastes, and deck drainage.

Two other discharges are associated with the proposed action but are not included in ***DOCD Appendix E*** because they are covered under other permit applications. First, produced water discharges (if any) resulting from production in DC 618 would occur at the Independence Hub location. These have been included in the DOCD submitted to the MMS by Anadarko for AT 305/349. Second, following hydrostatic testing of the right-of-way pipelines, there will be a hydrotest discharge at the Independence Hub location. All discharges will be in accordance with NPDES permit requirements.

A.5 MARINE TRASH AND DEBRIS

Trash will be transported to shore and disposed of according to applicable regulations. Dominion will adhere to MARPOL Annex V requirements, USEPA and U.S. Coast Guard (USCG) regulations, and MMS regulations and Notices to Lessees (NTLs) regarding solid wastes. MMS regulations prohibit operators from discharging containers and other similar materials (i.e., trash and debris) into the marine environment, and require durable identification markings on equipment, tools and containers (especially drums), and other material. USCG and USEPA regulations require that operators become proactive in avoiding accidental loss of solid waste items by developing waste management plans, posting informational placards, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. MMS NTL 2003-G11 instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires posting of placards at prominent locations on offshore vessels and structures, and requires a marine trash and debris awareness training and certification process.

A.6 SUPPORT OPERATIONS

Port Fourchon will serve as the primary base for supplies and crews for development operations. This base is located 160 miles from the project area. Expected travel frequency is listed below:

Support Vessel	Weekly Estimate (no. of round trips)	
	Completion Operations	Pipeline Installation
Crew Boat	5	3
Supply Boat	4	--
Helicopter	4	2

A.7 ACCIDENTS

Under "Accidents," an H_2S release was not considered as an IPF because MMS determined DC 618 to be "H_2S absent." Only oil spills and chemical spills are considered. For impact analysis, a large oil spill was represented by the Worst Case Discharge (WCD), calculated in the DOCD as 2,000 bbl of condensate for a well blowout or 2,457 bbl of diesel fuel from the rupture of the largest tank on the drilling rig.

Spill Probability. The probability of a major spill during offshore operations has been discussed in the Sale 181 and Sale 189/197 Environmental Impact Statements (EISs) (MMS, 2001a, 2003b). The Sale 181 EIS estimated that one to three blowouts could occur from all activities resulting from the sale (MMS, 2001a). The Sale 189/197 EIS estimated that one blowout could occur from all OCS program activities in the Eastern Planning Area between 2003 and 2042 (MMS, 2003b). Historically, most blowouts have not resulted in oil spills; of 151 well blowouts in the Gulf of Mexico from 1971 to 1995, 18 involved oil spills, with a total of 1,000 bbl of crude oil and condensate released (MMS, 2001a). The Sale 189/197 EIS estimated that no spills greater than 1,000 bbl would occur from OCS facilities in the Eastern Planning Area between 2003 and 2042 (MMS, 2003b).

Neither the Sale 181 EIS nor the Sale 189/197 EIS specifically estimates the probability of a large spill from a diesel tank rupture; however, this is considered a rare event. The historical record includes some such events in the Gulf of Mexico, but none for the period 1981-1999 (Anderson and LaBelle, 2000; MMS, 2001a).

Hypothetical oil spill trajectories were analyzed by the MMS for the Sale 181 EIS (MMS, 2001b). More recent trajectory analyses (Ji et al., 2002, 2004) are also discussed at the end of this subsection.

The Oil Spill Risk Analysis (OSRA) model is an extensive computer simulation of oil spill transport that uses realistic data for winds and currents. Of the 11 "launch areas" assumed for the Sale 181 OSRA modeling, Launch Area 06 includes DC 618 (**Figure 2**). This launch area consists entirely of water depths greater than 900 m and was intended to simulate spills from offshore rigs and platforms. For the purposes of this analysis, it is assumed that a diesel fuel or condensate spill would act in similar fashion to a crude oil spill, recognizing that the chemical compositions and relative susceptibilities of each to weathering are different.

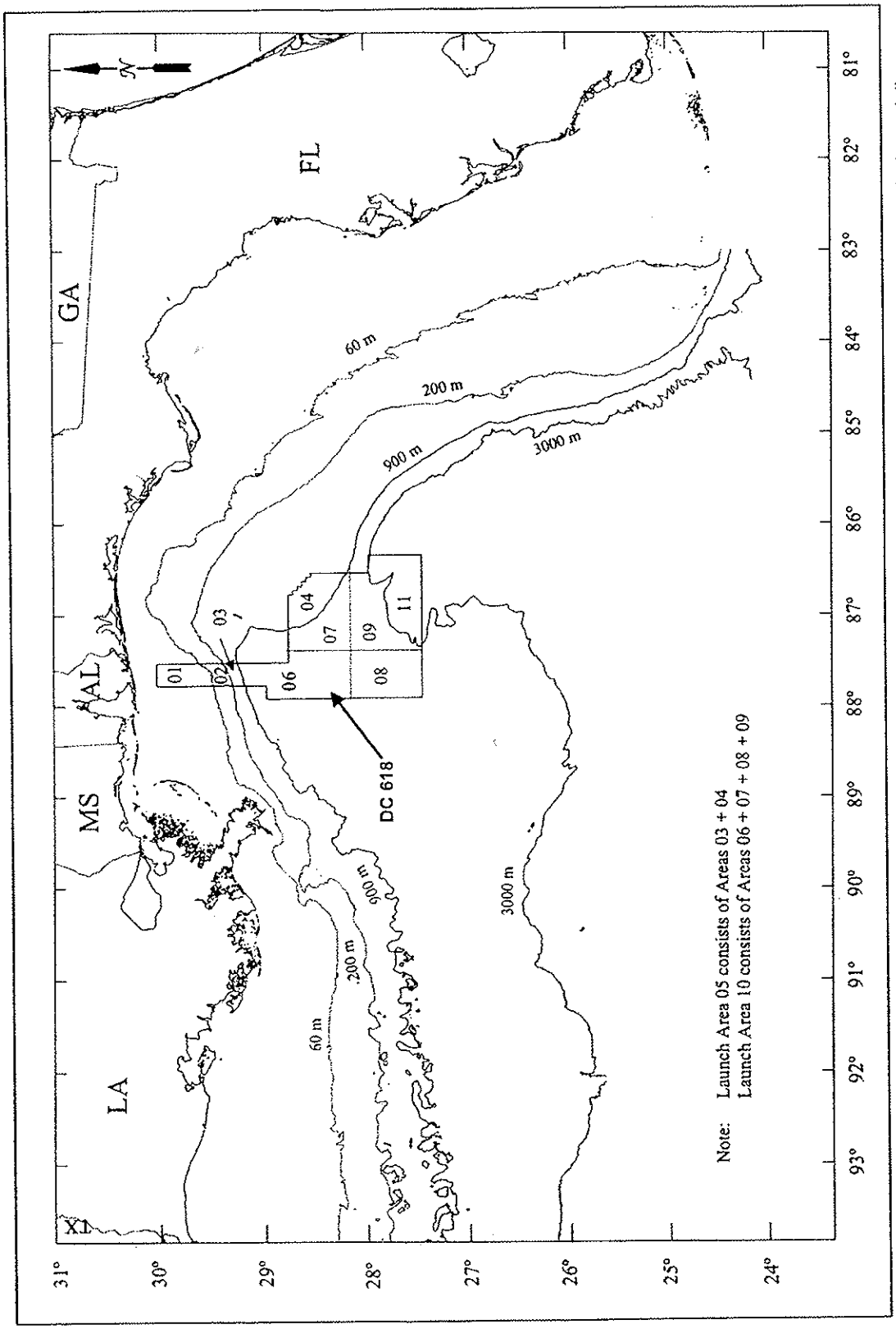

Figure 2. Locations of launch areas for hypothetical spill releases in Minerals Management Service (MMS) Oil Spill Risk Analysis modeling (MMS, 2001b). DeSoto Canyon (DC) Block 618 is in the deeper portions of Launch Area 06.

The MMS calculated average, maximum, and minimum contact probabilities for spills from each launch area. This was done because each launch area consists of numerous launch points separated by 4 to 5 statute miles in the north-south or east-west direction. The average values are considered most representative for the project area. Maximum contact probabilities are not representative because they reflect launch points in shallower water. The MMS also calculated average, minimum, and maximum values for each season in addition to an overall annual value.

The OSRA modeling mapped trajectories in relation to specific environmental resources. These included land segments from western Louisiana through peninsular Florida, state waters of each state, and particular areas of concern such as the Chandeleur Islands, Florida Gulf Islands National Seashore, Florida Big Bend seagrass beds, Madison and Swanson Special Management Area, Steamboat Lumps Special Management Area, and Florida Middle Grounds. **Table 2** summarizes the results for hypothetical spills from Launch Area 06. The values are average conditional probabilities of a spill contacting specific resources within 3, 10, or 30 days. The highest average probability for any season is also indicated.

The most important finding of this analysis is that a spill would not reach the shoreline or coastal waters of any state, or any of the environmental resources modeled, within 3 days. Because of weathering and spill response measures as discussed in ***DOCD Appendix F***, a diesel spill (or a condensate spill from a well blowout) is unlikely to persist long enough to reach these resources.

Additional trajectory analyses were done for the Sale 189/197 EIS (Ji et al., 2002, 2004). The OSRA report by Ji et al. (2004) presents conditional probabilities of a spill contacting various shoreline segments. The results for Launch Area 135 (where DC 618 is located) and Launch Area 59 (where MC 920 is located) are presented in **Table 3**. There is no expected contact with any shorelines within 3 days, and the only potential shoreline contacts within 10 days are Plaquemines Parish, Louisiana (2 percent and 5 percent for a spill in DC 618 and MC 920, respectively) and LaFourche Parish, Louisiana (1 percent for a spill in MC 920). Because of weathering and spill response measures, a spill is unlikely to persist long enough to reach any shorelines. The impact analysis assumes that significant quantities of spilled hydrocarbons would not reach coastal areas.

Table 2. Conditional probabilities of a spill contacting various environmental resources, based on the Sale 181 Oil Spill Risk Analysis (OSRA) (From: Minerals Management Service [MMS], 2001b). Values are probabilities (percent) that a hypothetical spill at the project area (represented by average probabilities for MMS Launch Area 06) could contact particular environmental resources within 3, 10, or 30 days. The highest average probability for any season is given in parentheses; season(s) of highest average probability are indicated as superscripts (1=winter, 2=spring, 3=summer, and 4=fall).

Environmental Resource	Conditional Probability[a]			Comments
	3 days	10 days	30 days	
State Waters				
• Western Louisiana state waters	-- (--)	5 (5^{2})	7 (8^{2})	
• Eastern Louisiana state waters	-- (--)	12 (17^{2})	17 (21^{2})	
• Mississippi state waters	-- (--)	1 ($2^{1,3}$)	3 (4^{2})	
• Alabama state waters	-- (--)	4 (5^{2})	6 (8^{2})	
• Florida Panhandle state waters	-- (--)	5 (8^{2})	13 (19^{2})	
• Florida peninsula state waters	-- (--)	-- (--)	4 (7^{2})	
Shorelines[b]				
• Western Louisiana (segments 11-18)	-- (--)	-- (1^{2})	1 ($1^{1,2,4}$)	
• Chandeleur Islands (Louisiana)	-- (--)	6 (9^{2})	9 (11^{2})	
• Eastern Louisiana, Mississippi, Alabama (segments 19-24)	-- (--)	3 (5^{2})	6 (8^{2})	
• Florida Panhandle (segments 25-29)	-- (--)	2 (3^{2})	3 (5^{2})	
• Florida Big Bend shoreline (segments 30-37)	-- (--)	-- (--)	1 ($1^{1,2,3}$)	Average probabilities predict no contacts from segment 34 (roughly Cedar Key) south
• Southwest Florida (segments 38-43)	-- (--)	-- (--)	-- (--)	
Specific Resources of Concern				
• Flower Garden Banks	-- (--)	-- (--)	-- (--)	Benthic resource, contact unlikely even if oil reached area
• Mobile Bay	-- (--)	1 (2^{4})	2 ($2^{1,2,3,4}$)	
• Florida Gulf Islands National Seashore	-- (--)	2 (3^{2})	4 ($5^{2,3}$)	
• Florida Big Bend seagrass beds	-- (--)	-- (--)	4 (7^{2})	
• Madison and Swanson Special Management Area	-- (--)	1 (2^{2})	2 (4^{2})	Benthic resource, contact unlikely even if oil reached area
• Steamboat Lumps Special Management Area	-- (--)	-- (--)	1 ($2^{2,3}$)	Benthic resource, contact unlikely even if oil reached area
• Florida Middle Grounds Habitat Area of Particular Concern	-- (--)	-- (--)	1 (3^{2})	Benthic resource, contact unlikely even if oil reached area

[a] Conditional probability refers to the probability of contact within the stated time period, assuming a spill occurred.
[b] "Segments" refer to shoreline segments as defined in the MMS OSRA modeling. Where multiple segments are listed, the one having the highest probability of contact was used.

Table 3. Conditional probabilities of a spill at the project area contacting shoreline segments, based on Oil Spill Risk Analysis (From: Ji et al., 2004). Values are probabilities (percent) that a hypothetical spill starting at DeSoto Canyon (DC) 618 (represented by Launch Area 135) or Mississippi Canyon (MC) 920 (represented by Launch Area 59) could contact shoreline segments within 3 or 10 days. Only segments with one or more non-zero values are listed.

Shoreline Segment	County or Parish and State	Conditional Probability of Contact[a]		
		3 days	10 days	30 days
Launch Area 135 (representing DC 618)				
C17	Terrebonne, LA	--	--	1
C18	LaFourche, LA	--	--	1
C20	Plaquemines, LA	--	2	8
C22	St. Bernard, LA	--	--	2
C24	Mobile, AL	--	--	1
C25	Baldwin, AL	--	--	1
C30	Bay, FL	--	--	1
C31	Gulf, FL	--	--	1
C32	Franklin, FL	--	--	1
Launch Area 59 (representing MC 920)				
C13	Cameron, LA	--	--	1
C14	Vermilion, LA	--	--	1
C17	Terrebonne, LA	--	--	2
C18	LaFourche, LA	--	1	2
C19	Jefferson, LA	--	--	1
C20	Plaquemines, LA	--	5	11
C21	St. Bernard, LA	--	--	2
C29	Walton, FL	--	--	1
C30	Bay, FL	--	--	1

[a] Conditional probability refers to the probability of contact within the stated time period, assuming that a spill has occurred (-- indicates less than 0.5 percent).

B. ANALYSIS

B.1 SITE-SPECIFIC AT OFFSHORE LOCATION

B.1.1 Designated Topographic Features

(a) Routine Operations

There are no IPFs associated with routine operations that could cause impacts to designated topographic features. The lease area is not in or near an MMS-designated topographic feature or no-activity zone. The geohazards evaluation indicates no submarine banks in the lease area.

(b) Accidents

The nearest designated topographic feature is Sackett Bank, which is over 100 km from the project area. The Flower Garden Banks are over 500 km away. Due to the spill weathering and response efforts, a spill would be unlikely to reach the vicinity of any topographic feature. Further, since the crests of designated topographic features in the northern Gulf are at least 10 m below the sea surface, concentrated oil would not be expected to reach their sessile biota. No impacts would be expected.

B.1.2 Pinnacle Trend Area Live Bottoms

(a) Routine Operations

There are no IPFs associated with routine operations that could cause impacts to pinnacle trend live bottoms. The lease area is not covered by the Live Bottom (Pinnacle Trend) stipulation. The geohazards evaluation indicates no hard bottom features in the lease area.

(b) Accidents

The pinnacle trend is along the shelf edge, about 100 km inshore of the lease area. Due to spill weathering and response efforts, a spill would be unlikely to reach the vicinity of the pinnacle trend area. Further, since the crests of pinnacle features are more than 50 m below the sea surface, concentrated oil would not be expected to reach their sessile biota. No impacts would be expected.

B.1.3 Eastern Gulf Live Bottoms

(a) Routine Operations

There are no IPFs associated with routine operations that could cause impacts to low-relief Eastern Gulf live bottoms. The Live Bottom (Low-Relief) stipulation applies to Eastern Planning Area leases in water depths of 100 m or less. The lease area is not covered by this stipulation. The geohazards evaluation indicates no hard bottom features in the lease area.

(b) Accidents

The nearest live bottom areas as defined by MMS stipulation are inshore of the 100-m isobath, over 100 km from the lease area. Because these are low-relief features on the seafloor, concentrated oil would not be expected to reach their sessile biota. No impacts would be expected.

B.1.4 Chemosynthetic Communities

(a) Routine Operations

There are no routine IPFs likely to cause impacts to chemosynthetic communities. There are no known chemosynthetic areas associated with DC 618. The shallow hazards report indicates that the area is clear of chemosynthetic communities. The seafloor appears to be void of geologic features that could support high-density chemosynthetic communities.

(b) Accidents

It is possible that undiscovered chemosynthetic communities exist in nearby deepwater lease blocks. However, a surface oil spill in the deepwater environment would not affect benthic communities, and a subsurface spill (e.g., a blowout) would be unlikely to affect benthic communities beyond a few hundred meters from the wellsite. Therefore, no impacts on chemosynthetic communities are likely.

B.1.5 Water Quality

(a) Routine Operations

Routine IPFs potentially affecting water quality include

- Effluent discharges; and
- Support operations.

Effluent Discharges. Effluent discharges affecting water quality include well completion fluids, sanitary and domestic wastes, and deck drainage. Minimal impacts on water quality are anticipated from these discharges in accordance with NPDES permit requirements. The discharges are either benign or would affect water quality slightly (e.g., suspended solids, nutrients, chlorine, and biochemical oxygen demand) within tens of meters of the discharge (MMS, 2003a).

Support Operations. Support vessels will discharge treated sanitary and domestic wastes. These will have a slight effect on water quality in the immediate vicinity of these discharges. Sanitary and domestic wastes may have elevated levels of nutrients, organic matter, and chlorine but should be diluted rapidly to undetectable levels within tens to hundreds of meters of the source. Minimal impacts on water quality are anticipated from these discharges in accordance with USCG requirements.

(b) Accidents

A spill in offshore waters would produce a slick on the water and temporarily increase hydrocarbon concentrations. The OSRA modeling indicates no contacts with shorelines within 3 days after a spill and a small probability of contacting any shoreline within 10 days. During this time, it is assumed that most or all of the spill volume would be removed due to spill weathering and response measures. Therefore, no significant impacts on coastal water quality would be likely.

A small chemical spill could produce short-term, localized impacts on water quality. Depending upon the chemical spilled and its solubility in seawater, chemicals will either be diluted, dissolved, or remain insoluble and disperse once they reach the sea surface or come in contact with seawater. The consequence of a spill of any of the chemicals in the chemical inventory would be dependent on the type and volume of chemicals released. A short-term, localized reduction in water quality might be expected.

B.1.6 Fisheries

The main commercial fishing activity in deep waters of the northern Gulf of Mexico is pelagic longlining for tuna, swordfish, and other billfishes (Continental Shelf Associates, Inc., 2002). Pelagic longlining has occurred historically in the project area, primarily during spring and summer. However, in August 2000, the Federal government closed two areas in the DeSoto Canyon area to longline fishing (65 Federal Register 47214, 1 August 2000). One of the closure areas includes DC 618 (**Figure 3**). The closure areas were created because longline fishing has been identified as contributing to the bycatch mortality of billfishes and undersized swordfish.

Longline gear consists of monofilament line that is deployed from a moving vessel and is generally allowed to drift for 4 to 5 hours (Continental Shelf Associates, Inc., 2002). As the mainline is put out, baited leaders and buoys are clipped in place at regular intervals. It takes 8 to 10 hours to deploy a 70-km longline and about the same time to retrieve it. Longlines are often set near oceanographic features such as fronts or downwellings, with the aid of sophisticated on-board temperature sensors, depth finders, and positioning equipment. Vessels are 10 to 30 m long, and their trips last from about 1 to 3 weeks. The main homeports for longlining vessels are Dulac and Venice, Louisiana; and Destin, Madeira Beach, and Panama City, Florida.

It is unlikely that any commercial fishing activity other than longlining is occurring at or near the project area. Benthic species targeted by commercial fishers occur on the upper continental slope, well inshore of the project area. Royal red shrimp are caught by trawlers in water depths of about 250 to 550 m. Tilefish are caught by bottom longlining in water depths from about 165 to 450 m (Continental Shelf Associates, Inc., 2002).

Most recreational fishing activity in the northeastern Gulf occurs in depths less than about 200 m (Continental Shelf Associates, Inc., 1997, 2002). In deeper water, the main attraction is petroleum platforms. Due to the distance from shore and the relatively small number of offshore structures, it is unlikely that any recreational fishing activity is occurring in the project area.

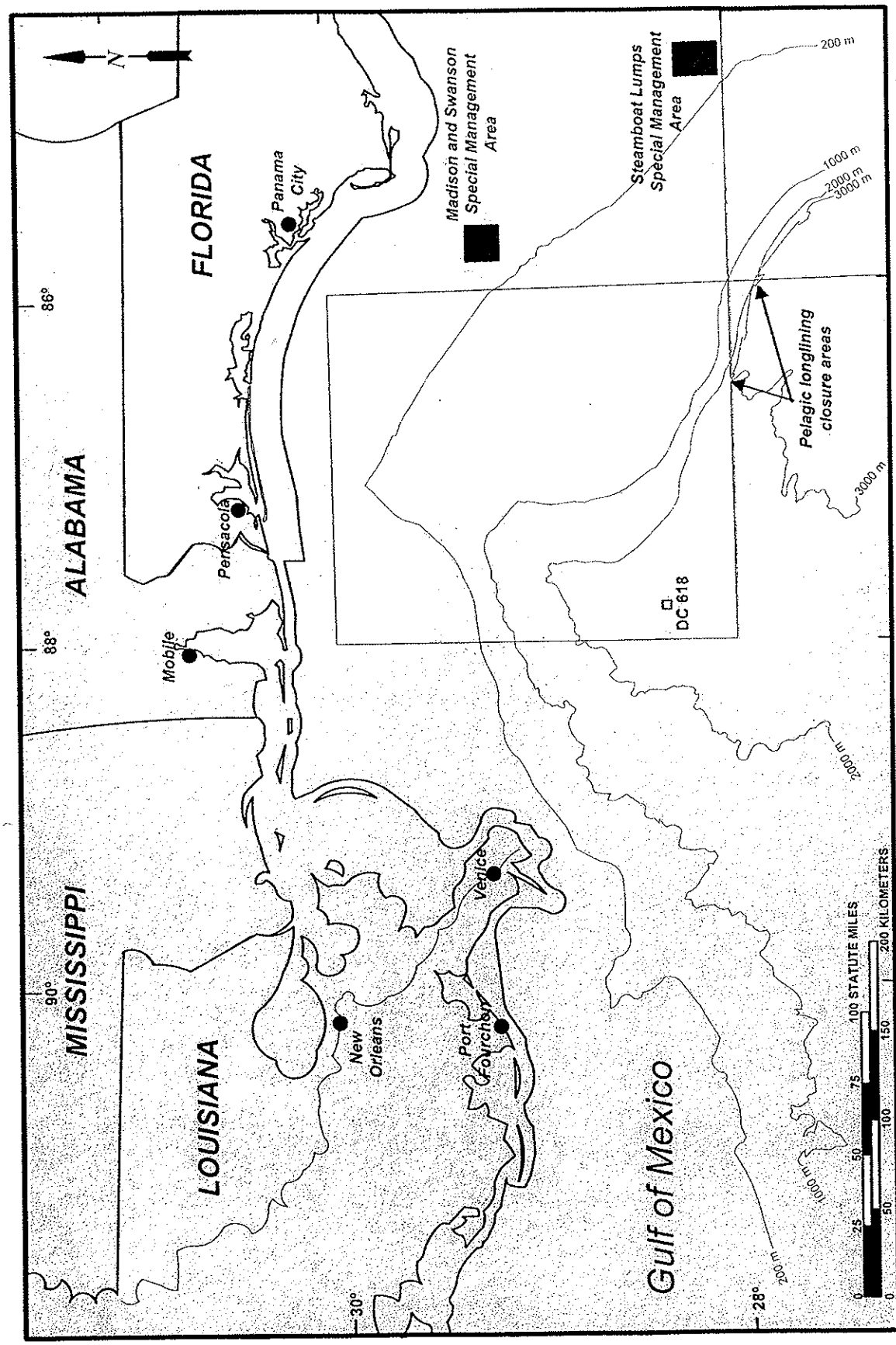

Figure 3. Fishery closure areas in the northeastern Gulf of Mexico. Crosshatched areas are closed to pelagic longline fishing (65 Federal Register 47214, 1 August 2000). Special management areas are closed to all fishing except for highly migratory species (tuna, billfishes, sharks), primarily to protect reef-associated groupers (65 Federal Register 31827, 19 May 2000).

(a) Routine Operations

Presence of structures is the only IPF that may have an impact on commercial fishing activity. There is a slight possibility of pelagic longlines becoming entangled with an offshore structure. For example, in January 1999, a portion of a pelagic longline snagged on the acoustic Doppler current profiler of a DP drillship working in the Gulf of Mexico (Continental Shelf Associates, Inc., 2002). The line was removed without incident. Generally, longline fishers use radar and are aware of offshore structures and ships when placing their sets. Therefore, little or no impact on pelagic longlining is expected.

As it is unlikely that any recreational fishing activity is occurring in the project area, no adverse impacts are anticipated. A minor beneficial impact is possible if recreational fishers are attracted to the Independence Hub.

Other factors such as effluent discharges are likely to have negligible impacts on commercial or recreational fisheries due to rapid dispersion, the small area of ocean affected, and the intermittent nature of the discharges.

(b) Accidents

Pelagic longlining activities could be temporarily disrupted in the event of a large spill in the project area. The area affected would be relatively small, and the duration presumably would be a few days, based on the anticipated weathering characteristics and spill response capabilities.

It is unlikely that any recreational fishing activity is occurring in the project area due to the distance from shore. Due to spill weathering and response measures, no disruption of commercial or recreational fishing activities in coastal waters would be expected.

B.1.7 Marine Mammals

(a) Routine Operations

Routine IPFs potentially affecting marine mammals include

- Presence of structures (noise and lights);
- Marine trash and debris; and
- Support operations.

Other factors such as effluent discharges are likely to have negligible impacts on marine mammals due to rapid dispersion, the small area of ocean affected, and the intermittent nature of the discharges.

The only endangered marine mammal potentially present at the project area is the sperm whale. The project area is near a region where sperm whales are frequently sighted, in the Mississippi Canyon area (Davis et al., 2000). The most common nonendangered cetaceans in the deepwater environment are odontocetes such as pantropical spotted dolphin, spinner dolphin, and clymene dolphin. Other odontocetes that may be present include dwarf and pygmy sperm whales, four species of beaked whales, and 14 species of dolphins and porpoises (MMS, 2003b).

The Florida manatee is a coastal species that does not occur in the project area. Manatees sometimes occur in Louisiana coastal waters (where the shore base is located) during

summer months, and vessel strikes are a major cause of manatee mortality in peninsular Florida, where most of the manatee population is located. Florida manatees are not likely to be adversely affected by oil and gas activities in the area (U.S. Fish and Wildlife Service [USFWS], 2001). Routine activities are not expected to have any impacts on manatees, and they are not discussed further.

Presence of Structures (noise and lights). Sperm whales may or may not avoid the project area. Noise associated with OCS activities is of relatively low frequency, typically between 4.5 to 30 Hz (Richardson et al., 1995). The sperm whale appears to have good low frequency hearing, but the available data do not indicate a consistent response to anthropogenic noise (National Marine Fisheries Service [NMFS], 2002). Sperm whales have been known to stop echolocating or vocalizing when disturbed by certain low frequency sounds. Noise associated with drilling is relatively weak in intensity, and individual sperm whales' noise exposure would be transient. There is already considerable offshore oil and gas activity in nearby regions of the central Gulf, including drilling and production operations, support vessel and helicopter activity, and seismic surveys.

Other cetaceans may or may not avoid the project area due to noise. Most odontocetes have their best hearing in high frequencies and are less likely to be disturbed by low frequency noise. Noise associated with drilling is also relatively weak in intensity, and marine mammals' exposure to these sounds would be transient.

Marine Trash and Debris. Ingestion of, or entanglement with, accidentally discarded debris can kill or injure marine mammals. The disposal of solid waste from drilling rigs and vessels is prohibited by the MMS and the USCG under MARPOL regulations. In addition, MMS has issued NTL 2003-G11, which instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires posting of placards at prominent locations on offshore vessels and structures, and requires a marine trash and debris awareness training and certification process. Compliance with this NTL and any related MMS requirements is assumed to be effective in minimizing the potential for debris-related impacts on marine mammals.

Support Operations. Vessel and helicopter traffic may startle or disturb marine mammals. Reactions may range from apparent indifference to evasive moves (e.g., turns, diving, etc.). Many of the reactions of marine mammals to vessel traffic appear to be primarily a result of noise, though there may be visual or other cues as well.

There is a small risk of a supply or crew boat striking a sperm whale. There have been reports of sperm whale deaths attributed to striking the propeller of a vessel (NMFS, 2002). Sperm whales are found within oceanic waters and are therefore more likely to encounter vessels traveling at high speeds, both during daylight and nighttime hours. Although sperm whales are capable of avoiding these vessels, it is possible that collisions may occur under certain circumstances. For example, sperm whales periodically spend extended periods of time (up to 30 minutes) to restore oxygen levels within their tissues after deep dives. The most likely impact on sperm whales would be vessel avoidance rather than collision.

To reduce the potential for vessel strikes, the MMS has issued NTL 2003-G10, which recommends protected species identification training, specifies ways for vessel operators and crews to avoid vessel strikes, and requires operators to report sightings of any injured

or dead protected species. Compliance with this NTL and any related MMS requirements is assumed to be effective in minimizing the likelihood of vessel strikes.

(b) Accidents

Sperm Whale (endangered species). The sperm whale is the only endangered marine mammal likely to be affected by an oil spill at the project area. Sperm whales are widely distributed in the Gulf of Mexico, but concentrations occur in the Mississippi Canyon area south of the Mississippi River Delta (Davis et al., 2000). Though the areas of sperm whale concentrations are relatively small, it is possible that a spill could reach areas frequented by sperm whales prior to weathering. The total area of a slick is expected to be small relative to the available deepwater habitat. Oil exposure would not persist in the open ocean, and the animals could avoid oiled areas. Although a spill could contact sperm whales, primarily sublethal effects are expected due to avoidance and natural dispersion/weathering of the spill in the offshore environment (MMS, 2003b).

Florida Manatee (endangered species). The Florida manatee occasionally occurs in coastal waters of Louisiana, Mississippi, Alabama, and the Florida Panhandle during summer months. OSRA modeling indicates no contacts with shorelines within 3 days and a small probability of contacting any shoreline within 10 days after a spill at the project area. During this time, natural weathering processes and spill response measures as described in the Sub-Regional Oil Spill Response Plan (OSRP) are assumed to remove most or all of the spilled oil, preventing significant impacts to manatees or their habitat. In addition, the number of manatees potentially present along this coast is a small fraction of the population in peninsular Florida, and the population is not likely to be adversely affected by offshore oil and gas activities, including an oil spill (USFWS, 2001).

Other Marine Mammals. The most common nonendangered cetaceans in the deepwater environment are pantropical spotted dolphin, spinner dolphin, and clymene dolphin. Other species that may be present include dwarf and pygmy sperm whales, four species of beaked whales, and 14 species of dolphins and porpoises. The total area affected by a spill is expected to be small relative to the available deepwater habitat. Although a spill could contact marine mammals, primarily sublethal effects are expected due to avoidance and natural dispersion/weathering of the spill in the offshore environment (MMS, 2003b).

B.1.8 Sea Turtles

Five species of endangered or threatened sea turtles may be found near the project area. Endangered species are the leatherback (*Dermochelys coriacea*), Kemp's ridley (*Lepidochelys kempii*), and hawksbill (*Eretmochelys imbricata*) sea turtles. The loggerhead sea turtle (*Caretta caretta*) is a threatened species. The green sea turtle (*Chelonia mydas*) is listed as threatened, except for the Florida breeding population, which is listed as endangered.

Leatherbacks and loggerheads are the turtles most likely to be present as adults near the project area. Leatherbacks are the most pelagic of the sea turtles and were frequently sighted on the continental slope during GulfCet II aerial surveys (Mullin and Hoggard, 2000). Leatherbacks were sighted on the continental slope in the northeastern Gulf during summer months, but not during winter. Although loggerheads were more abundant in shallower water, they were also sighted in deepwater areas during winter (Mullin and Hoggard, 2000). Green, hawksbill, and Kemp's ridley turtles are typically

inshore species that are unlikely to occur near the project area as adults. Hatchlings or juveniles of any of the sea turtles may be present in deepwater areas, where they may be associated with sargassum and other flotsam.

Sea turtle nesting in the northeastern Gulf of Mexico can be summarized as follows:

- Loggerhead turtles nest in significant numbers along the Florida Panhandle and to a lesser extent in Alabama, Mississippi, and Louisiana. Loggerheads account for over 99 percent of turtle nests on northwest Florida beaches, with their nesting season extending from 1 May through 31 October (MMS, 2003b).
- Green turtles infrequently nest on Florida Panhandle and Alabama beaches, generally between 1 May and 30 September (Meylan et al., 1995; Alabama Game and Fish Division, 1997).
- Leatherback turtles occasionally nest on Florida Panhandle beaches from 1 May through 31 October (MMS, 2003b).
- Hawksbill and Kemp's ridley turtles do not nest anywhere near the project area.

(a) Routine Operations

Routine IPFs potentially affecting sea turtles include

- Presence of structures (noise and lights);
- Marine trash and debris; and
- Support operations (service vessels and helicopters).

Other factors such as effluent discharges are likely to have negligible impacts on sea turtles due to rapid dispersion, the small area of ocean affected, and the intermittent nature of the discharges.

Presence of Structures (noise and lights). Offshore drilling activities produce a broad array of sounds at frequencies and intensities that may be detected by sea turtles (Geraci and St. Aubin, 1987). Potential impacts may include behavioral disruption and temporary or permanent displacement from the area near the sound source. Certain sea turtles, especially loggerheads, may be attracted to offshore structures and thus may be more susceptible to impacts from sounds produced during routine operations. Helicopters and service vessels may also affect sea turtles due to machinery noise and/or visual disturbances. The most likely impacts would be short-term behavioral changes such as diving and evasive swimming, disruption of activities, or departure from the area.

Turtle hatchlings may be attracted to brightly lit offshore platforms, where they may be subject to increased predation by birds and fishes that are also attracted to offshore structures. However, NMFS (2002) indicates that attraction to offshore platforms is unlikely to appreciably reduce the reproduction, numbers, or distribution of sea turtles in the wild.

Marine Trash and Debris. Ingestion of, or entanglement with, accidentally discarded solid debris can kill or injure sea turtles (Lutcavage et al., 1997). Some adult sea turtles such as loggerheads and leatherbacks may ingest plastic debris. The disposal of solid waste from drilling rigs and vessels is prohibited. Also, MMS has issued NTL 2003-G11, which instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires posting of placards at prominent locations on offshore vessels and structures, and requires a marine trash and debris awareness training and certification process. Compliance with this NTL and any

related MMS requirements is assumed to be effective in minimizing the potential for debris-related impacts on sea turtles.

Support Operations (service vessels and helicopters). There is a chance of collision between service vessels and sea turtles. While adult turtles are visible at the surface during the day and in clear weather, they can be difficult to spot from a moving vessel when resting below the water surface or during nighttime or periods of inclement weather. To reduce the potential for vessel strikes, the MMS has issued NTL 2003-G10, which recommends protected species identification training, specifies ways for vessel operators and crews to avoid vessel strikes, and requires operators to report sightings of any injured or dead protected species. Compliance with this NTL and any related MMS requirements is assumed to be effective in minimizing the likelihood of striking sea turtles.

(b) Accidents

Any of the five species of sea turtles could be affected by a spill in offshore waters. However, the turtles most likely to be affected would be leatherbacks and loggerheads, the most common adult turtles in offshore waters. Leatherbacks and loggerheads are regularly sighted within deepwater areas over the continental slope. In addition, juvenile turtles are regularly found within convergence zones in deepwater areas. The total area of a slick is expected to be small relative to the available deepwater habitat. Although turtle numbers within the deepwater Gulf are small when compared to the continental shelf, it is possible that individuals may come into contact with a spill. It is possible that some individuals may not recover from such exposure. However, primarily sublethal effects are expected (MMS, 2003b).

The OSRA modeling indicates no contacts with any shorelines within 3 days and a small probability of contacting any shoreline within 10 days. During this time, it is assumed that most or all of the spill volume would be removed due to weathering and response measures. Therefore, no significant impacts on turtle nesting beaches would be expected.

B.1.9 Air Quality

There are no site-specific air quality data for the project area. The attainment status of Federal OCS waters is unclassified because there is no provision for classification in the Clean Air Act for waters outside of state waters (MMS, 2003b). Due to the distance from shore-based pollution sources, offshore air quality is expected to be good.

All coastal counties and parishes in Louisiana, Mississippi, Alabama, and Florida are considered to be in attainment of the National Ambient Air Quality Standards for carbon monoxide (CO), sulfur dioxide, nitrogen dioxide, and suspended particulate matter (PM_{10}). Five Louisiana parishes (Ascension, Iberville, East Baton Rouge, West Baton Rouge, and Livingston) are nonattainment areas for ozone.

The Breton National Wilderness Area, which is part of the Breton National Wildlife Refuge is designated under the Clean Air Act as a Prevention of Significant Deterioration Class I air quality area. This area is protected by stringent air quality standards administered by the USFWS. Mitigating measures, including low sulfur diesel fuels and stricter air emissions monitoring and reporting requirements, are required for sources that are within 100 km of the Breton Class I area and that exceed emissions levels agreed

upon by the administering agencies. The project area is beyond the 100-km radius from Breton Island, and therefore no special requirements apply.

(a) Routine Operations

Routine IPFs potentially affecting air quality include

- Air emissions; and
- Support operations (service vessels and helicopters).

Routine offshore air pollutant emissions will result from completion operations and from installation of subsea facilities in the lease area. Emissions occur mainly from combustion or burning of fuels and natural gas and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps, or motors and from lighter fuel motors. Primary air pollutants associated with OCS activities are nitrogen oxides, CO, sulfur oxides, volatile organic compounds (VOCs), and PM_{10}.

Due to the distance from shore, routine operations in the project area will have no impact on air quality conditions along the coast, including the Florida Panhandle. ***DOCD Appendix G*** provides the Projected Air Quality Emissions Report prepared in accordance with NTL 2003-G17. Included are drilling rig and support vessel emissions during completion operations, and emissions from vessels (lay barge, tugs, support vessels) that will install lease-term pipelines in the lease area. As shown in **Table 4**, the projected annual emissions are below the exemption levels, and therefore no further analysis is required. A separate calculation for installation and operation of the Independence Hub has been submitted to the MMS by Anadarko in the DOCD for AT 305/349.

(b) Accidents

A large spill would affect air quality in the vicinity of the oil slick by introducing VOCs through evaporation. The emissions would not last long due to rapid volatilization of hydrocarbons. Evaporation is greatest within the first few days (MMS, 2003b). The extent and persistence of impacts would depend on the meteorological and oceanographic conditions at the time.

The OSRA modeling indicates no contacts with shorelines within 3 days after a spill, when most of the evaporation occurs. Therefore, little or no impact on air quality in coastal or onshore areas would be expected.

A small chemical spill could also produce short-term, localized impacts on air quality (for example, if chemical dust or VOCs were released). The consequence of a spill of any of the chemicals in the chemical inventory would be dependent on the type and volume of chemicals released. A short-term, localized reduction in air quality might be expected following a spill of volatile materials.

Table 4. Summary of air emissions calculations.

Year	Emitted Substance (tons)					Includes
	Particulate Matter	Sulfur Oxides	Nitrogen Oxides	Volatile Organic Compounds	Carbon Monoxide	
2006	46.17	211.79	1,586.97	47.61	346.25	Completion, Flowline installation
Allowable	2,997.00	2,997.00	2,997.00	2,997.00	68,282.16	

B.1.10 Shipwreck Sites (known or potential)

(a) Routine Operations

There are no IPFs associated with routine operations that are likely to cause impacts to shipwreck sites. DC 618 is not on the MMS list of blocks determined to have a high probability of archaeological resources. Likewise, neither the Independence Hub location (MC 920) nor the lease blocks along the pipeline rights-of-way are on the MMS list. Therefore, no impacts are expected.

(b) Accidents

The OSRA modeling indicates no contacts with coastal waters or shorelines within 3 days and a small probability of contacting any shoreline within 10 days after a spill. Based on spill weathering characteristics and planned response measures, it is considered highly unlikely that a large oil spill in the project area would reach coastal areas or very shallow waters where shipwreck sites might become contaminated with oil.

B.1.11 Prehistoric Archaeological Sites

(a) Routine Operations

There are no IPFs that are likely to cause impacts to prehistoric archaeological sites. DC 618 is not on the MMS list of blocks determined to have a high probability of archaeological resources. Likewise, neither the Independence Hub location (MC 920) nor the lease blocks along the pipeline rights-of-way are on the MMS list. Therefore, no impacts are expected.

(b) Accidents

The OSRA modeling indicates no contacts with coastal waters or shorelines within 3 days and a small probability of contacting any shoreline within 10 days after a spill. Based on the anticipated spill weathering characteristics and planned response measures, it is considered highly unlikely that a spill in the project area would reach coastal areas or very shallow waters where prehistoric sites could become contaminated with oil.

B.2 VICINITY OF OFFSHORE LOCATION

B.2.1 Essential Fish Habitat

Most fishery species in the Gulf of Mexico are managed by the Gulf of Mexico Fishery Management Council (GMFMC). This council has prepared fishery management plans (FMPs) identifying EFH for corals and coral reefs, shrimp, stone crab, spiny lobster, reef

fishes, coastal pelagic fishes, and red drum, none of which occur within the deeper waters overlying the lease area.

Another group of exploited species, the highly migratory pelagic fishes, are managed by NMFS. In its FMP for Atlantic tunas, swordfish, and sharks that inhabit the Gulf of Mexico, NMFS (1999) addressed EFH for managed highly migratory species. These include 10 sharks, 3 tunas, and 1 swordfish species of concern. These migratory species may occur as transients in the project area. EFH includes most of the substrate and water column of the Gulf of Mexico where the managed species commonly occur. Although billfishes (sailfish [*Istiophorus platypterus*], blue marlin [*Makaira nigricans*], white marlin [*Tetrapterus albidus*], and longbill spearfish [*T. pfluegeri*]) are now managed as highly migratory species, there were no EFH designations in NMFS (1999).

Spatially limited EFH called habitat areas of particular concern (HAPCs) have also been identified in the Gulf of Mexico by the GMFMC. These include Dry Tortugas (Fort Jefferson National Monument), Florida Keys National Marine Sanctuary, Florida Middle Grounds, and Flower Garden Banks National Marine Sanctuary. While no HAPCs are located near the lease area, migratory species that use these HAPCs may migrate through the area.

While the project area *per se* is not recognized as an important or critical area for breeding or migrations, the presence of the Loop Current (normally located to the south of the project area) and its role as a migratory pathway for highly migratory pelagic fish species suggest that migrants may be rare but present intermittently. Deepwater habitats, including those of the project area, may provide spawning areas for pelagic fishes such as king and Spanish mackerels and others.

(a) Routine Operations

Routine IPFs potentially affecting EFH include

- Presence of structures; and
- Effluent discharges.

Presence of Structures. The drilling rig and the Independence Hub will act as fish attracting devices (FADs). In oceanic waters, the FAD effect would be most pronounced for epipelagic fishes such as tunas, dolphin, billfishes, and jacks, which are commonly attracted to fixed and drifting surface structures (e.g., Holland et al., 1990; Higashi, 1994; Relini et al., 1994). This FAD effect would possibly enhance feeding of epipelagic predators by attracting and concentrating smaller fish species.

Effluent Discharges. Effluent discharges affecting EFH via diminution in ambient water quality include well completion fluids, sanitary and domestic wastes, and deck drainage. Impacts on water quality have been discussed previously. No significant impacts on EFH are expected from these discharges.

(b) Accidents

A major spill in offshore waters would produce a slick on the water and temporarily increase hydrocarbon concentrations. Given that EFH includes most of the substrate and water column of the Gulf of Mexico where highly migratory managed species commonly occur, some impact on EFH would be unavoidable. However, the area affected would be

a small percentage of the EFH in the Gulf of Mexico, and the duration would be brief (few hours to a few days).

A large spill could affect water column biota including phytoplankton, zooplankton, and nekton. While adult and juvenile fishes may actively avoid a large oil spill, the planktonic eggs and larvae would be unable to avoid contact. Eggs and larvae of fishes will die if exposed to certain toxic fractions of spilled oil. Most of the fishes inhabiting shelf or oceanic waters of the Gulf of Mexico have planktonic eggs and larvae. Impacts would be potentially greater if local scale currents retained planktonic larval assemblages (and the floating oil slick) within the same water mass. However, due to the wide dispersal of early life history stages of fishes in the surface waters of the Gulf of Mexico, a spill is not expected to have significant impacts at the population level.

A blowout resulting in a condensate spill could affect benthic communities within a few hundred meters of the wellsite. The impacts are discussed under Benthic Communities. The spill could affect a relatively small area of soft bottom seafloor, which would be recolonized by benthic organisms over a period of months to years. Neither chemosynthetic nor live bottom communities are found in the lease blocks. Therefore, a major spill is unlikely to have any impacts on EFH for demersal fishes.

The project area is not recognized as an important or critical area for breeding or migrations. However, the Loop Current, which is generally located south of the project area but sometimes overlaps it, serves as a migratory pathway for bluefin tuna and other migratory pelagic fishes as they move between the Gulf of Mexico and adjacent waters. Migratory species that migrate through the area following a spill could be exposed briefly to the spill. In open ocean waters, especially those near the Loop Current, it is expected that a spill would be naturally dispersed and weathered rapidly. Due to the limited area affected by a deepwater spill and the rapid dissolution and evaporation of the slick, no significant impacts on breeding habitats or migration routes would be expected.

B.2.2 Marine and Pelagic Birds

A variety of seabirds may occur in the pelagic environment of the project areas (Peake, 1996; Hess and Ribic, 2000). Seabirds spend much of their lives offshore over the open ocean, except during breeding season when they nest along the coast. In addition, other birds such as waterfowl, marsh birds, and shorebirds may occasionally be present over open ocean areas. No endangered or threatened bird species are likely to occur at the project area due to the distance from shore. For a discussion of Shore Birds and Coastal Nesting Birds, see **EIA Section B.3.3**.

Seabirds of the northeastern Gulf of Mexico were surveyed from ships during the GulfCet II program. Hess and Ribic (2000) reported that terns, storm-petrels, shearwaters, and jaegers were the most frequently sighted seabirds in the deepwater area (>200 m). Relationships with hydrographic features were found for several species, possibly due to effects of hydrography on nutrient levels and productivity of surface waters where birds forage. GulfCet II did not estimate bird densities; however, Powers (1987) indicates that seabird densities over the open ocean typically are <10 birds/km^2.

(a) Routine Operations

Routine IPFs potentially affecting marine and pelagic birds include

- Presence of structures; and
- Marine trash and debris.

Other factors such as effluent discharges are likely to have negligible impacts on marine birds due to rapid dispersion, the small area of ocean affected, and the intermittent nature of the discharges.

Presence of Structures. Pelagic seabirds and trans-Gulf migrant birds may be present at the project area. Birds may use offshore drilling rigs and platforms for resting, feeding, or as temporary shelter from inclement weather (Russell, 2005). Some birds may be attracted to offshore structures because of the lights and the fish populations that aggregate around these structures. Birds that frequent platforms may be exposed to contaminants including air pollutants and routine discharges, but significant impacts are unlikely due to rapid dispersion. Birds migrating over water at night have been known to strike offshore structures, resulting in death or injury (Wiese et al., 2001; Russell, 2005).

Marine Trash and Debris. Debris lost overboard from offshore operations can injure or kill birds that ingest or become entangled in it. MMS regulations and Federal law prohibit disposal of trash and debris in the ocean. In addition, MMS has issued NTL 2003-G11, which instructs operators to exercise caution in the handling and disposal of small items and packaging materials, requires posting of placards at prominent locations on offshore vessels and structures, and requires a marine trash and debris awareness training and certification process. Compliance with this NTL and any related MMS requirements is assumed to be effective in minimizing the potential for debris-related impacts on birds.

(b) Accidents

Pelagic seabirds could be exposed to oil from a spill at the project area. Hess and Ribic (2000) reported that terns, storm-petrels, shearwaters, and jaegers were the most frequently sighted seabirds in the deepwater Gulf of Mexico (>200 m). Powers (1987) indicates that seabird densities over the open ocean typically are <10 birds/km^2, and therefore total numbers of birds potentially affected by a spill would be small.

Spilled oil may affect birds through various pathways. Direct contact with oil may result in the fouling or matting of feathers with subsequent limitation or loss of flight capability, or insulating or water repellent capabilities; irritation or inflammation of skin or sensitive tissues such as eyes and other mucous membranes; or toxic effects from ingested oil or the inhalation of oil or related volatile distillates. The Eastern Gulf multisale EIS discusses these impacts (MMS, 2003b).

B.2.3 Public Health and Safety

(a) Routine Operations

There are no IPFs associated with routine operations that are expected to affect public health and safety.

(b) Accidents

An H_2S release was not considered as an IPF because MMS determined DC 618 to be "H_2S absent." No impacts on public health and safety are expected from an H_2S release.

In the event of a major spill from a tank rupture or blowout, the main safety and health concerns are those of the offshore personnel responding to such a spill. The proposed activities will be covered by the Sub-Regional OSRP, and in addition, the drilling rig and the Independence Hub will maintain a Shipboard Oil Pollution Emergency Plan as required under MARPOL 73/78. Dominion will use the best and safest technologies throughout the project, including spill response efforts. Based on the WCD discharge volumes, anticipated weathering characteristics, and response measures as detailed in the Sub-Regional OSRP, it is expected that most or all of the spill would be removed before reaching coastal waters or shorelines. Therefore, no impacts on the health and safety of the general public are expected.

B.3 COASTAL AND ONSHORE

Coastal habitats in the northeastern Gulf of Mexico that may be affected by oil and gas activities are described in the Eastern Gulf multisale EIS (MMS, 2003b) and in a literature review by Collard and Way (1997). Sensitive coastal habitats are also tabulated in Dominion's Sub-Regional OSRP. Coastal habitats inshore of the project area include barrier beaches and dunes, wetlands, and submerged seagrass beds. Generally, most of the northeastern Gulf is fringed by barrier beaches, with wetlands and/or submerged seagrass beds occurring in sheltered areas behind the barrier islands and in estuaries.

B.3.1 Beaches

(a) Routine Operations

There are no IPFs associated with routine activities that could affect beaches due to the distance from shore.

(b) Accidents

The OSRA modeling indicates no contacts with any shorelines within 3 days after a spill (see **Table 2**). In addition, there is a small probability of contacting any shoreline within 10 days. During this time, most or all of the spill volume is assumed to be removed due to spill weathering and response measures. Therefore, no significant impacts on beaches are expected.

B.3.2 Wetlands

(a) Routine Operations

Coastal wetlands are unlikely to be affected by a routine IPF due to the distance from shore. Support operations including crew boats and supply boats may have a minor incremental impact on coastal wetlands. Over time with a large number of vessel trips, vessel wakes can erode shorelines along inlets, channels, and harbors. This is particularly of concern in coastal Louisiana because of the existing high rate of coastal wetland loss. Impacts are assumed to be minimized by following the speed and wake restrictions in harbors and channels.

(b) Accidents

The OSRA modeling indicates no contacts with shorelines within 3 days after a spill and a small probability of contacting any shoreline within 10 days. During this time, most or all of the spill volume is assumed to be removed due to spill weathering and response measures. Therefore, no significant impacts on wetlands are expected.

B.3.3 Shore Birds and Coastal Nesting Birds

The following bird species of concern are found in inshore waters or onshore areas:

- Brown pelican;
- Piping plover;
- Southeastern snowy plover; and
- Bald eagle.

Two other endangered species are mentioned in the Eastern Gulf multisale EIS (MMS, 2003b) but do not warrant further discussion: (1) the least tern, for which the endangered designation applies only to interior populations; and (2) the whooping crane, which is not likely to be present inshore of the project area (they winter at Aransas National Wildlife Refuge, Texas).

Brown Pelican. The eastern brown pelican (*Pelecanus occidentalis*) inhabits coastal habitats and forages within coastal waters and waters of the inner continental shelf. Aerial and shipboard surveys including GulfCet and GulfCet II indicate that brown pelicans do not occur in deep, offshore waters (Fritts and Reynolds, 1981; Peake, 1996; Hess and Ribic, 2000). Subsequent to the ban of DDT pesticide, this species has successfully recolonized much of its former range. It has been de-listed from its endangered status in Alabama and Florida, though it is still listed as endangered in Louisiana and Mississippi (USFWS, 2002). Brown pelicans are listed by Florida as a species of special concern.

Piping Plover. The piping plover (*Charadrius melodus*) is a migratory shorebird that overwinters along the southeastern U.S. and Gulf of Mexico coasts. Piping plovers inhabit coastal sandy beaches and mudflats. This species is currently in decline and listed as threatened as a result of historic hunting pressure, and habitat loss and degradation (Ehrlich et al., 1992). Critical habitat has been proposed, including coastal areas in Florida, Alabama, Mississippi, and Louisiana.

Southeastern Snowy Plover. The southeastern snowy plover (*Charadrius alexandrinus tenuirostris*) is a shorebird that nests within Gulf of Mexico coastal habitats such as dry sandy beaches and flats. Though not federally listed as endangered or threatened (USFWS, 2002), it is listed as threatened by the State of Florida due to population declines resulting from habitat loss and degradation (Ehrlich et al., 1992). Nesting sites in the Florida Panhandle range from the Alabama border eastward beyond Little St. George.

Bald Eagle. The southern bald eagle (*Haliaeetus leucocephalus*) is a terrestrial raptor that is widely distributed across the southern U.S., including coastal habitats along the Gulf of Mexico. The Gulf coast is inhabited by both wintering migrant and resident bald eagles (Johnsgard, 1990; Ehrlich et al., 1992). Populations of southern bald eagles have increased in recent years as a result of the ban of DDT pesticide and the efforts of intense

recovery programs. Populations in the lower 48 states are classified as threatened, but the USFWS has proposed to de-list the species in the lower 48 states (USFWS, 2002).

(a) Routine Operations

Due to the distance from shore, the only routine IPF that may affect shore birds and coastal nesting birds is support operations. Support vessels and helicopters will transit coastal areas in Louisiana where species such as the brown pelican, piping plover, snowy plover, and bald eagle may be found. Helicopter and vessel traffic could periodically disturb individuals or groups of birds within sensitive coastal habitats (e.g., wetlands that may support feeding, resting, or breeding birds). However, Federal Aviation Administration guidelines and corporate helicopter policies specify that pilots maintain a minimum altitude of 213 m (700 ft) while in transit offshore, 305 m (1,000 ft) over unpopulated areas or across coastlines, and 610 m (2,000 ft) over populated areas and sensitive habitats such as wildlife refuges and park properties. Vessel operators use designated navigation channels and comply with posted speed and wake restrictions while transiting sensitive inland waterways. With these guidelines in effect, it is likely that individual birds would experience at most only short-term, behavioral disruption.

(b) Accidents

Coastal bird species of concern that could be affected include the brown pelican, piping plover, southeastern snowy plover, and bald eagle. Brown pelicans typically do not venture offshore of the inner continental shelf. Piping plovers and southeastern snowy plovers could encounter the spill only if it reached coastal habitats. A spill would not be expected to contact or otherwise impact bald eagles unless contamination and subsequent cleanup activities occurred within the vicinity of eagle nesting or roosting sites. The OSRA modeling indicates no contacts with any shorelines within 3 days after a spill and a small probability of contacting any shoreline within 10 days. During this time, it is assumed that most or all of the spill volume would be removed due to spill weathering and response measures. Therefore, no significant impacts on shore birds or coastal nesting birds, including species of concern, are expected.

B.3.4 Coastal Wildlife Refuges

National wildlife refuges along the coast from Cedar Key, Florida through Louisiana include four in Florida (Cedar Keys, Lower Suwannee, St. Marks, and St. Vincent), two in Alabama (Grand Bay and Bon Secour), one in Mississippi (Grand Bay), and three in Louisiana (Breton, Delta, and Shell Keys). In addition, there are various State wildlife refuges in coastal areas (tabulated in Dominion's Sub-Regional OSRP).

(a) Routine Operations

Due to the distance from shore, there are no IPFs associated with routine activities that are likely to affect coastal wildlife refuges.

(b) Accidents

Coastal wildlife refuges could be affected only if a major spill occurred and the oil was transported to shore in significant quantities before being weathered by natural processes or dispersed by response measures. The OSRA modeling indicates that no coastal areas would be contacted by oil within 3 days, and there is a small probability of oil contacting any shoreline within 10 days. During this time, most or all of the spill would be removed

due to natural weathering processes and spill response measures as described in the Sub-Regional OSRP. Therefore, no significant impacts on coastal wildlife refuges or other protected areas are expected.

B.3.5 Wilderness Areas

Wilderness areas and other protected coastal areas in Louisiana, Mississippi, Alabama, and the Florida Panhandle include a national seashore, numerous Wildlife Management Areas and State Parks, aquatic preserves, and other managed areas. There is also an Audubon Bird Sanctuary on the eastern end of Dauphin Island, Alabama. These areas include habitats such as barrier beach and dune systems, wetlands, and submerged seagrass beds that support wildlife including endangered or threatened species.

(a) Routine Operations

Due to the distance from shore, there are no IPFs associated with routine activities that are likely to affect wilderness areas.

(b) Accidents

Wilderness areas and other protected areas in Louisiana, Mississippi, Alabama, and the Florida Panhandle could be affected only if a major spill occurred and the oil was transported to shore in significant quantities before being weathered by natural processes or dispersed by response measures. The OSRA modeling indicates no shoreline contacts within 3 days and a small probability of contacting any shoreline within 10 days. During this time, most or all of the spill would be removed due to spill weathering and response measures as described in the OSRP. Therefore, no significant impacts on coastal wilderness areas are expected.

B.4 OTHER RESOURCES

B.4.1 Benthic Communities

The seafloor within the lease blocks is expected to consist of soft sediments. Water depths in the lease range from about 2,339 to 2,397 m (7,675 to 7,865 ft). These depths would place the project area within the Mesoabyssal Zone for both megafauna and macroinfauna, as defined by Gallaway (1988). In terms of megafauna, the fish assemblage is characterized as depauperate, consisting of five species including *Dicrolene kanazawai* and *Basozetus normalis* (Pequegnat et al., 1990). Macroinfaunal densities reported by Gallaway (1988) for these depths are about 500 to 1,000 individuals/m^2. There are no individual dominant species in the deep-sea macroinfauna, but polychaetes are the most abundant and diverse group.

Meiofauna (animals passing through a 0.5-mm sieve but retained on a 0.062-mm sieve) and microbiota are also important components of the deep-sea benthos. Rowe (2000) indicates little information is available on either group for the deep Gulf. Meiofaunal densities and biomass in the depths of the project area are higher than those of the macroinfauna (Gallaway, 1988). Available data suggest that bacteria are the most important biotic component in terms of biomass, and much of the organic carbon supplying the benthos with energy cycles through the bacteria (Cruz-Kaegi, 1998).

A deep Gulf of Mexico benthos program has expanded on the depth and geographic coverage of the previous continental slope study (Rowe and Kennicutt, 2002). The study includes stations at depths from 300 m to over 3,000 m. The nearest station (S37) is

located about 20 km from the project area and in a water depth of about 2,300 m (**Figure 4**). Preliminary data show macrofaunal densities at Station S37 are about 6,000 to 10,000 individuals/m^2. Elevated macrofaunal densities were noted at some stations near DeSoto Canyon, which may be attributable to organic matter accumulation. These densities are considerably higher than those reported previously by Gallaway (1988).

(a) Routine Operations

The most important IPFs on deepwater benthic communities are physical disturbances of the seafloor. In ***EIA Section A.1***, the total area disturbed was estimated to be about 6 ha for installation of subsea facilities in DC 618 and about 16.5 ha for installation of right-of-way pipelines connecting to the Independence Hub. Anchoring of the drilling rig will disturb a small area at each of eight anchor locations in the DC 618 area. A few hectares are assumed to be disturbed in MC 920 by the 12 suction pilings used to moor the Independence Hub.

These physical disturbances may result in crushing of soft-bottom benthic fauna, burial or disruption of fauna, and increased turbidity from sediment resuspension. Disturbed bottom sediments will be recolonized through larval settlement and migration from adjacent areas. Because some deep-sea biota grow and reproduce slowly, recovery may require several years.

At the seafloor, bottom-dwelling fishes and invertebrates may be attracted to the structure provided by subsea facilities, including well trees, umbilical termination assemblies, in-field flowlines and umbilicals, and jumpers.

Pursuant to NTL No. 2003-G03, operators may be required to conduct remotely operated vehicle (ROV) surveys during pre-spudding and post-drilling operations for the purpose of biological and physical observations. If required by the MMS, Dominion will conduct an ROV survey as specified under this NTL. ROV surveys provide information about the extent of impacts on deepwater benthic communities.

(b) Accidents

A blowout resulting in a condensate spill could affect benthic communities within a few hundred meters of the wellsite. While some oil could initially adhere to surface sediments surrounding the wellsite, resulting in smothering and/or toxicity to benthic organisms, most of the oil is assumed to rise rapidly through the water column. The physical impacts of a subsurface blowout are also a consideration. The MMS (2003b) estimates that a severe subsurface blowout could resuspend and disperse sediments within a 300-m radius. While coarse sediments (sands) would probably settle at a rapid rate within 400 m from the blowout site, fine sediments (silts and clays) could be resuspended for more than 30 days and dispersed over a much wider area. Surface sediments at the project area are assumed to be largely silt and clay, based on previous studies (Gallaway, 1988). The affected area would be recolonized by benthic organisms over a period of months to years.

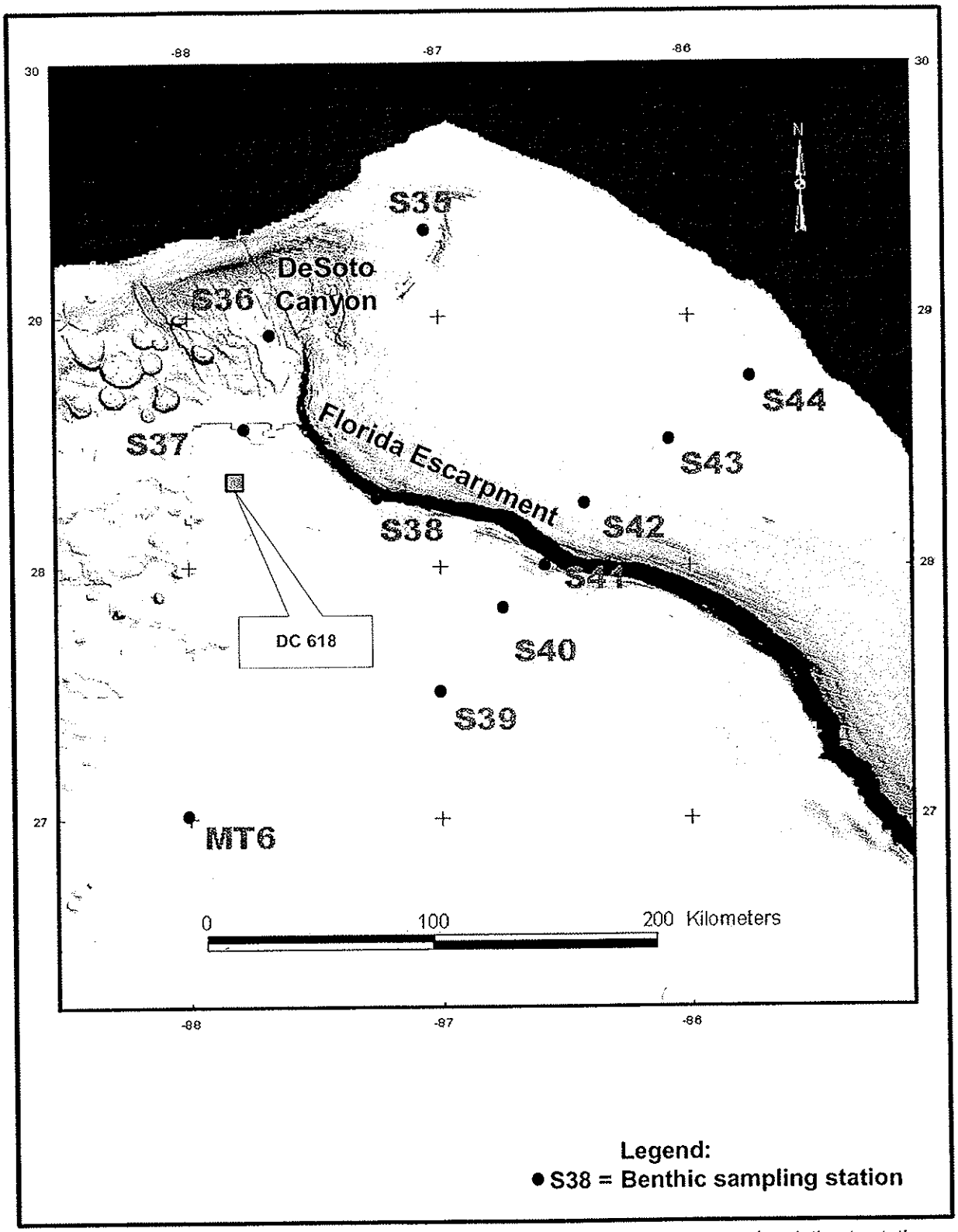

Figure 4. Location of DeSoto Canyon Block 618 at base of the Florida Escarpment in relation to stations of the Deep Gulf of Mexico Benthos Program (Rowe and Kennicutt, 2002).

Neither chemosynthetic nor live bottom communities are found in the lease blocks. It is possible that undiscovered chemosynthetic communities exist in other deepwater lease blocks, and live bottom areas are known to be present on the Mississippi-Alabama shelf and shelf edge. However, a spill at the sea surface is unlikely to reach the seafloor. Therefore, a major spill is unlikely to have any impacts on sensitive benthic habitats.

A chemical spill at the surface would be unlikely to affect benthic communities unless heavy or solid materials (e.g., pieces of copper or lead) were lost overboard and sank rapidly to the bottom. Material accumulating on the seabed could kill or injure a few benthic organisms or alter the sediment quality in a small area that would most likely already be disturbed by previous cuttings and drilling fluid releases. Impacts on benthic communities would be minor to negligible.

B.4.2 Pelagic Communities

(a) Routine Operations

Routine IPFs potentially affecting pelagic communities include

- Presence of structures; and
- Effluent discharges.

Presence of Structures. The drilling rig (short term) and the Independence Hub (longer term) will act as FADs. In oceanic waters, the FAD effect would be most pronounced for epipelagic fishes such as tunas, dolphin, billfishes, and jacks, which are commonly attracted to fixed and drifting surface structures (e.g., Holland et al., 1990; Higashi, 1994; Relini et al., 1994). This FAD effect would possibly enhance feeding of epipelagic predators by attracting and concentrating smaller fish species.

Effluent Discharges. Effluent discharges affecting pelagic biota include well completion fluids, sanitary and domestic wastes, and deck drainage. Minimal impacts on water quality and biota are anticipated from these discharges in accordance with NPDES permit requirements. The discharges are either benign or would affect water quality slightly (e.g., suspended solids, nutrients, chlorine, and biochemical oxygen demand) within tens of meters of the discharge (MMS, 2003a).

(b) Accidents

A large spill could affect water column biota including phytoplankton, zooplankton, and nekton. While adult and juvenile fishes may actively avoid a large oil spill, the planktonic eggs and larvae would be unable to avoid contact. Eggs and larvae of fishes will die if exposed to certain toxic fractions of spilled oil. Most of the fishes inhabiting shelf or oceanic waters of the Gulf of Mexico have planktonic eggs and larvae (Richards et al., 1989, 1993). Impacts would be potentially greater if local scale currents retained planktonic larval assemblages (and the floating oil slick) within the same water mass. However, due to the wide dispersal of early life history stages of fishes in the surface waters of the Gulf of Mexico, a spill is not expected to have significant impacts at the population level.

The inventory of chemicals on board for the project is predominantly formulations with low environmental hazards to the marine environment, and quantities transported are relatively small, hence a chemical spill will have lower environmental implications compared to a large oil spill. Any chemical spill reaching the sea surface has the

potential to interact with marine organisms in the immediate vicinity of the spill. Phytoplankton, zooplankton, and nekton may potentially encounter spilled chemicals; however, rapid dilution, dissolution, or dispersal via wind and wave action will temper such impacts. Impacts on pelagic communities would be negligible.

B.4.3 Offshore Areas of Concern

In the offshore environment, areas of biological concern (excluding chemosynthetic and live bottom communities, which have been discussed in separate sections) include two pelagic longline fishing closure areas, two Special Management Areas, and one HAPC.

Pelagic Longline Fishing Closure Areas. In August 2000, the Federal government closed two adjacent areas in the DeSoto Canyon area to longline fishing (65 Federal Register 47214, 1 August 2000). One of the closure areas includes the lease area (see **Figure 3**). The areas were closed because longline fishing may be contributing to the bycatch mortality of billfishes and undersized swordfish.

Special Management Areas. The Madison and Swanson Special Management Area and the Steamboat Lumps Special Management Area (**Figure 3**) are hard bottom areas on the continental shelf that are believed to be important for grouper spawning. Established by the GMFMC (65 Federal Register 31827, 19 May 2000), these are experimental research reserves that are closed to all fishing except highly migratory species (tuna, billfishes, sharks), primarily to protect groupers, which are associated with hard bottom areas.

Florida Middle Grounds Habitat Area of Particular Concern. The Florida Middle Grounds is a hard bottom feature located about 160 km northwest of Tampa Bay. It consists of two types of large reef structures: mountain-like pinnacles and flat-top plateaus. The tops of the structures are in depths of about 20 to 30 m, and they slope down to depths of 36 to 40 m. The hard bottom is covered with dense algae, large sponges, sea whips, and several stony coral species. Fish populations include 170 species (Jaap, 2000). The site has been designated as an HAPC since 1984. This is a Federal fishery management zone intended to protect fragile coral resources.

(a) Routine Operations

There are no routine IPFs that are expected to have any impacts on pelagic longline fishing closure areas, special management areas, or HAPCs.

(b) Accidents

Pelagic Longline Fishing Closure Areas. Presumably, portions of these areas could be contacted within a day by a spill in the project area. However, the relative area affected would be small. Although individual fishes including juveniles and floating larvae could be killed by exposure to spilled diesel fuel or condensate, no significant or persistent impacts at the population level are likely.

Special Management Areas. The OSRA modeling indicates no contacts with these areas within 10 days after a spill, during which time it is assumed that most or all of the spill volume would be removed due to weathering and response measures. Therefore, no impacts on these special management areas would be expected. In any case, no impact is likely because the protected resource is at the seafloor.

Florida Middle Grounds Habitat Area of Particular Concern. The OSRA modeling indicates no contact with this area within 10 days, during which time all of the spill volume would be removed due to weathering and response measures. Therefore, no impacts are expected. Also, no impact is likely because the protected resource is at the seafloor.

B.4.4 Gulf Sturgeon

The Gulf sturgeon (*Acipenser oxyrinchus DeSotoi*) is the only listed threatened fish species in the Gulf of Mexico. An anadromous fish that migrates from the sea upstream into coastal rivers to spawn in freshwater, it historically ranged from the Mississippi River to Charlotte Harbor, Florida (Wakeford, 2001). Today, this range has contracted to encompass major rivers and inner shelf waters from the Mississippi River to the Suwannee River, Florida. Populations have been depleted or even extirpated throughout this range by fishing, shoreline development, dam construction, water quality changes, and other factors (Barkuloo, 1988; Wakeford, 2001). These declines prompted the listing of the Gulf sturgeon as a threatened species in 1991. The best known populations occur in the Apalachicola and Suwannee Rivers in Florida (Carr, 1996; Sulak and Clugston, 1998), the Choctawhatchee in Alabama (Fox et al., 2000), and the Pearl in Mississippi/Louisiana (Morrow et al., 1998).

Adult Gulf sturgeon spend March through October in the rivers and November through February in estuarine or shelf waters. The offshore distribution of Gulf sturgeon during winter months is not known, but there have been no reported catches in Federal OCS waters (MMS, 2003b).

In 2003, critical habitat for the Gulf sturgeon was designated in Louisiana, Mississippi, Alabama, and Florida. Critical habitat identifies specific areas that are essential to the conservation of Gulf sturgeon and that may require special management considerations or protections. Fourteen geographic areas among the Gulf of Mexico rivers and tributaries were designated critical habitat. The areas extend from Lake Borgne in Louisiana to Suwannee Sound in Florida (MMS, 2004).

(a) Routine Operations

There are no IPFs associated with routine project activities that are likely to affect Gulf sturgeon.

(b) Accidents

Presumably, Gulf sturgeon could be affected if oil reached very shallow waters or coastal rivers. However, the OSRA modeling indicates no contacts with coastal waters within 3 days after a spill and a small probability of any shoreline contact within 10 days. During this time, it is assumed that most or all of the spill volume would be removed due to spill weathering and response measures. Therefore, no significant impacts on Gulf sturgeon are expected.

B.4.5 Endangered Beach Mice and Florida Salt Marsh Vole

Four subspecies of endangered beach mouse occur on barrier islands of Alabama and the Florida Panhandle (MMS, 2003b). The Florida salt marsh vole occurs in a single marsh location near Cedar Key.

(a) Routine Operations

There are no IPFs associated with routine project activities that could affect endangered beach mice or the Florida salt marsh vole due to the distance from shore and the lack of any onshore support activities near any area inhabited by these species.

(b) Accidents

The OSRA modeling indicates no contacts with shorelines inhabited by beach mice within 10 days after a spill and no contacts within 30 days with shorelines adjacent to the Florida salt marsh vole habitat (land segment 34). By this time, it is assumed that all of the spill volume would be removed due to spill weathering and response measures. Therefore, no significant impacts on beach mice or Florida salt marsh voles are expected.

B.4.6 Economic and Demographic Conditions

(a) Routine Operations

The project involves offshore operations with support from existing shore base facilities in Louisiana. Due to the low level of activity and the small number of personnel involved, the project will have a negligible impact on economic and demographic conditions including local employment, and local population centers and industry. No new employees are expected to move permanently into the area.

(b) Accidents

Response to a spill would involve existing resources and personnel, and therefore it would not be expected to have any impact on employment, local population centers, or industry. The OSRA modeling indicates no contacts with shorelines within 3 days after a spill and a small probability of contacting any shorelines within 10 days after a spill. During this time, all of the spill volume would be removed due to spill weathering and response measures. Therefore, no direct or indirect impacts on economic conditions due to oiling of waters or shorelines, cleanup activities, etc. would be expected.

B.4.7 Land Use

(a) Routine Operations

The project will use existing onshore support facilities in coastal Louisiana. The existing land use is industrial. The project will not involve any new construction or changes to existing land use, and therefore will not have any impacts. Levels of boat and helicopter traffic, as well as demand for goods and services including scarce coastal resources, will represent a small fraction of the overall level of activity occurring at the shore base.

(b) Accidents

An offshore spill would not be expected to affect land use.

B.4.8 Recreation and Tourism

(a) Routine Operations

There are no known recreational uses of the lease blocks. Recreational resources and tourism in coastal areas would not be affected by any routine activities due to the distance from shore. Dominion will comply with all applicable regulations, NTLs, and lease stipulations regarding solid waste disposal. Waste management practices including waste minimization and recycling programs will minimize the chance of trash or debris being lost overboard and subsequently washing up on beaches.

(b) Accidents

The OSRA modeling indicates no contacts with shorelines within 3 days after a spill and a small probability of contacting any shorelines within 10 days after a spill. During this time, all of the spill volume would be removed due to spill weathering and response measures. Therefore, no impacts on coastal recreation and tourism would be expected.

B.4.9 Public Opinion

Most stakeholders in Florida are already intensely opposed to offshore drilling and production activities, whether near the coast or more than 100 miles offshore (Blanchard, 1999). Public opinion in coastal Alabama is more mixed, with many residents supporting oil and gas activities and others opposing them (Blanchard, 1999). It is unlikely that public opinion will be affected by the proposed activities, except in the event of a major oil spill reaching coastal waters, which is highly unlikely based on the spill modeling (**Tables 2** and **3**).

B.4.10 Coastal Littoral Processes

There are no IPFs associated with routine project activities that could affect littoral processes. In the unlikely event of a diesel or crude oil spill, impacts on coastal littoral processes are highly unlikely due to the measures detailed in the Sub-Regional OSRP and the distance from shore.

B.4.11 Navigation

There are no IPFs associated with either routine project activities or accidents that are likely to affect navigation. The blocks are not located within any USCG-designated fairway or shipping lane. No impacts on marine shipping or navigation are anticipated. The blocks are located within military warning area EWTA-1F; Dominion will comply with MMS requirements and lease stipulations to avoid impacts on uses of the area by military vessels and aircraft.

B.4.12 Other Uses of the Area

There are no other known uses of the lease, and therefore no impacts are anticipated.

C.1 GEOLOGIC HAZARDS

Shallow hazards reports covering DC 618 were submitted with the Initial Exploration Plans for this lease in accordance with NTL 2003-G17 and NTL 98-20. The analysis concluded that the wellsites are free of any major hazards. A shallow hazard report covering MC 920 (Independence Hub location) has been submitted separately to the MMS by Anadarko. Right-of-way pipelines will be permitted under separate pipeline applications that will contain individual hazard assessments. The pipeline route hazard assessments indicate there are no geologic hazards along the pipeline route that would hinder pipeline or umbilical construction activities or impede performance.

C.2 SEVERE WEATHER

Under most circumstances, weather is not expected to have any effect on the proposed activities. Extreme weather, including high winds, strong currents, and large waves, has been taken into account in the design criteria for the drilling rig and the Independence Hub. High winds and limited visibility during a severe storm could disrupt support activities (vessel and helicopter traffic) and might make it necessary to suspend some activities for safety reasons until the storm or weather event passes. In the event of a hurricane, procedures as outlined in Dominion's Hurricane Evacuation Plan as well as the rig's Emergency Response Manual for Hurricanes would be adhered to.

C.3 CURRENTS AND WAVES

Under most circumstances, physical oceanographic conditions are not expected to have any effect on the proposed activities. Strong currents and large waves have been taken into account in the design criteria for the drilling rig and the Independence Hub. High waves during a severe storm could disrupt support activities (vessel and helicopter traffic) and might make it necessary to suspend some activities for safety reasons until the storm or weather event passes.

D. ALTERNATIVES

In the development of the proposed action, Dominion has considered various technical and operational options. However, no formal alternatives were analyzed.

E. MITIGATION MEASURES

The proposed action does not involve any mitigation measures other than those required by laws and regulations, including all applicable Federal, State, and local requirements concerning air emissions, discharges to water, and solid waste disposal, as well as any additional permit requirements. All project activities will be conducted under an MMS-approved Sub-Regional OSRP.

F. CONSULTATION

No persons or agencies were consulted during the preparation of this EIA.

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Appendix I
Coastal Zone Management Consistency Certification Format

Attachments to Appendix I

a. CZM Certification for Louisiana
b. CZM Certification for Alabama
c. CZM Certification for Florida

PUBLIC INFORMATION

COASTAL ZONE MANAGEMENT PROGRAM CONSISTENCY CERTIFICATION

DEVELOPMENT OPERATION COORDINATION DOCUMENT

DESOTO CANYON BLOCK 618

OCS-G-23526

The proposed activities described in detail in this Development Operation Coordination Document comply with Louisiana's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

DOMINION EXPLORATION & PRODUCTION, INC.
Operator

David McBride
Director, Environmental, Health, Safety & Regulatory
Certifying Official

March 31, 2005
Date

PUBLIC INFORMATION

State of Louisiana

Coastal Zone Consistency Policies

A. Guidelines Applicable to All Users

1.2 Air and Water Quality Standards

a. Calculations for the air emissions for the proposed development project was made using a matrix and formula prepared by the Minerals Management Service who has authorization from the Environmental Protection Agency for governing these emissions. This project will be below the exemption levels for Carbon Monoxide, Particulate Matter, Sulphur Oxides, Nitrogen Oxides and Volatile Organic Compounds.

b. Waste from the proposed development project that is to be discharged overboard, such as drilling fluids and cuttings, must first be tested for toxicity limitations per EPA's NPDES General Permit GMG280000. Other dischargeable waste such as ground food will first be run through a 25-millimeter mesh screen before being discharged overboard per U. S. Coast Guard's Marine Pollution Research and Control Act (MARPOL). Other solid wasted will be manifested and sent to an approved onshore disposal site within the State of Louisiana via an offshore support vessel. These solid wastes will be disposed of per the State of Louisiana's Department of Environmental Quality's regulations.

1.6 General Factors that will be utilized by the permitting authority.

Approval for the proposed development operations will be obtained from the Minerals Management Service with coastal consistency certification from the State of Louisiana. Approval for overboard discharges will be obtained from Environmental Protection Agency and the approval for aids to navigation and general workplace safety will be through the U.S. Coast Guard.

1.7 Adverse effects from land and water uses in the coastal area.

The proposed development operations are located approximately 90 miles from the nearest Louisiana shoreline, in OCS Federal Waters in the Gulf of Mexico. An oil spill or blowout is the greatest potential endangerment to the shoreline and/or water uses in the coastal area.

Dominion Exploration & Production, Inc. requires regulatory compliance from its contractors and vendors associated with the proposed activities. Protection of the environment while conducting development operations is of the utmost importance.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possible following the plan prescribed in our Regional and Subregional Oil Spill Response Plan.

Since the proposed project is development and short-term, it is not likely that land water uses in the coastal area will be impacted. In the event of a blowout or spill, Dominion Exploration & Production, Inc. would respond as per our Regional and Subregional Oil Spill Plan greatly reducing the probability of the spill reaching land or coastal waters, especially providing that wind and water currents could potentially redirect the spill away from coastal areas.

PUBLIC INFORMATION

1.9 Permitting multiple uses to avoid conflict.

The only anticipated multiple use conflict that is anticipated are exercises conducted with the military warning area by the Defense Department. Dominion Exploration & Production, Inc. will coordinate our activities with the appropriate command headquarters to ensure that any potential conflicts are addressed and thus avoided.

C. Guidelines for Linear Facilities

1.1 Linear use alignments.

The proposed development activities in this plan do not require linear facilities.

1.2 Linear facilities dredging or filling avoidance.

The proposed development activities in this plan do not require linear facilities relating to dredging or filling avoidance criteria.

1.3 Linear facilities dredging or filling guidelines.

The proposed development activities in this plan do not require linear facilities relating to dredging or filling guidelines.

1.4 Pipeline "push ditch" methodology.

The proposed activities in this plan are development and short-term and do not require any pipeline development operations.

1.5 Facilities with corridors, rights-of-way, canals, and streams.

The proposed activities in this plan are development and short-term and do not require any linear facilities with corridors, right-of-way and/or streams. As a result, there will not be any consequential adverse impacts to these areas.

1.6 Multiple uses

Other then military warning area exercises which may be conducted by the Department of Defense, and precautionary measures in coordinating activities within the lightering zone, the proposed activities will not impact or be impacted by potential multiple use conflicts. Dominion Exploration & Production, Inc. will coordinate our activities with the appropriate command headquarters to ensure that any potential conflicts are addressed and thus avoided.

1.7 Barrier Island traverses.

The proposed activities in this plan are development and short-term and do not require any barrier island traversing for related linear facility development. As a result, these areas should not be adversely impacted by the proposed activities in this plan.

1.8 Beach, tidal passes, protective reef, or shoreline traverses.

The proposed activities in this plan are development and short-term and do not require any related linear facility development. As a result, these areas should not be adversely impacted by the proposed activities in this plan.

PUBLIC INFORMATION

1.9 Location guidelines.

The proposed activities in this plan are development and short-term and do not require any related linear facility development. As a result, these areas should not be any applicable location guidelines.

1.10 Planning guidelines.

The proposed activities in this plan are development and short-term and do not require any related facility development. If the well is successful a well protector will be installed over the well head. As a result, there should not be any applicable planning guidelines.

1.11 Saline to freshwater channeling.

The proposed activities in this plan are development and short-term and do not require any related linear facility development. As a result, saline to freshwater channeling should not be impacted adversely.

1.12 Directional drilling, multiuse canals, and accesses.

The proposed activities in this plan are development and short-term and do not require any multiuse canals and accesses. There will be directional drilling but it is not significant and not in coastal waters, thus, should not adversely impact the area.

1.13 Pipeline guidelines.

The proposed activities in this plan are development and short-term and do not require the installation of a linear pipeline facility. As a result, the proposed activities should not adversely impact the area.

1.14 Restoration

The proposed activities in this plan are development and short-term and do not require linear facility related development which may require the restoration of state water bottom lands. The proposed operations should not adversely impact the area.

1.15 Best practical techniques.

The proposed activities in this plan are development and short-term and do not require any linear facility development. As a result, the activities would not required to be reviewed for best practical techniques other than adhering to company and industry wide standards for conducting safe, and environmentally sound drilling related operations.
Therefore, there should not be any adverse impacts as a result of the proposed operations.

1.16 Dead end canals.

The proposed activities in this plan are development and short-term and do not require linear facility development which would require dead end canals. Therefore, there should not be any adverse impacts as a result of the proposed operations.

D. Guidelines for Dredged Spoil Deposition

4.1 Best practical techniques.

The proposed development operations do not require any dredging activities.

4.2 Beneficial use of soil.

Since there are no proposed dredging activities associated with this project, there is no resulting beneficial use of soil deposition.

4.3 Preventing impounding or draining wetlands.

Since there are no dredging activities associated with this project, there is no threat of impounding or draining wetlands and therefore no techniques or options to review to prevent such.

4.4 Disposal restrictions.

Since there are no dredging activities associated with this project, there are no soil disposal issues that would require restriction.

4.5 Preventing navigation, fishing, and timber growth hindrances.

Since there are no dredging activities associated with this project, there should not be any resulting impact to navigation, fishing and / or timber growth hindrances.

4.6 Spoil retention techniques.

Since there are no dredging activities associated with this project, spoil retention techniques are not required.

4.7 DNR Consent for State-Owned Property.

Since there are no dredging activities associated with this project, there is no need for approval from the Department of Natural Resources for state-owned property.

E. Guidelines for Surface Alterations.

1.1 Industrial, commercial, urban, residential, and recreational use guidelines.

Since the proposed project is development and short term, there are no surface damaging activities proposed within the coastal zone (i.e. lands 5 feet or more above sea level, and/or have foundation conditions sufficiently stable to support the use).

Dominion Exploration & Production, Inc. will use an existing shorebase in Fourchon, Louisiana which should not cause any impact to the surface area.

G. Guidelines for Hydrologic and Sediment Transport Modifications

7.1 Controlled diversion of sediment-laden waters to initiate marsh building.

Since the proposed project is development and short term and not in Louisiana State Waters, the project should not cause any controlled diversion of sediment-laden waters.

7.3 Undesirable deposition of sediments.

Since the proposed project is development and short term there shouldn't be any undesirable deposition of sediments.

7.9 Withdrawal of surface and ground water.

Since the proposed project is development and short term it should not require the withdrawal of surface and ground water.

H. Guidelines for Disposal of Wastes.

8.1 Location and operation of waste storage, treatment, and disposal facilities.

Waste produced from the proposed project that is not allowed to be discharged overboard will be manifested and transported via supply boat to an approved waste disposal facility in the State of Louisiana

As per regulations, Dominion Exploration & Production, Inc. will manifest the above waste using form UIC-28 from the Department of Environmental Quality.

8.2 Generation, transportation, treatment, storage, and disposal facilities.

Waste produced from the proposed project that is not allowed to be discharged overboard will be manifested and transported via supply boat to an approved waste disposal facility in the State of Louisiana.

As per regulations, Dominion Exploration & Production, Inc. will manifest the above waste using form UIC-28 from the Department of Environmental Quality. Dominion Exploration & Production, Inc. will conduct any required testing for toxicity, naturally occurring radioactivity prior to disposal.

8.8 Approval Disposal Sites

Waste produced from the proposed project that are not allowed to be discharged overboard will be manifested and transported via supply boat to an approved waste disposal facility in the State of Louisiana.

8.9 Radioactive waste.

Radioactive waste is not anticipated for this project.

I. Guidelines for Uses that Result in the Alteration of Waters Draining into Coastal Waters.

9.2 Developed area runoff.

Since the proposed project is development and short term, and does not have any proposed permanent facilities there should not be an impact on area runoff in coastal waters.

J. Guidelines for Oil, Gas, and other Mineral Activities.

10.3 Siting on development, production and refining activities.

The proposed project is approximately 90 miles from the nearest Louisiana shoreline and will not impact any critical wildlife and/or vegetation areas.

PUBLIC INFORMATION

10.4 Access to sites.

No new waterways will need to be made to access the surface location for the proposed project. Consequently, there should be no adverse impacts on critical wildlife and/or vegetation areas.

10.5 Best practical techniques for drilling and production sites.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possibly following the plan prescribed in their Regional and Subregional Oil Spill Response Plan.

EPA NPDES General Permit GMG280000, as well as the U. S. Coast Guard's MARPOL regulate the overboard discharge of waste from the proposed project.

10.10 Guidelines for drilling and production equipment for preventing adverse effects.

Dominion Exploration & Production, Inc. had a shallow hazard assessment of the area performed before selecting the proposed locations in this project. The surface locations were chosen in keeping with the results of the shallow hazard assessment.

10.11 Effective environmental protection and emergency or contingency plans.

Dominion Exploration & Production, Inc. will utilize their Regional and Subregional Oil Spill Response Plan, Emergency Evacuation Plan and Waste Management Plan along with applicable state and federal regulations for the proposed development operations.

PUBLIC INFORMATION

COASTAL ZONE MANAGEMENT PROGRAM CONSISTENCY CERTIFICATION

DEVELOPMENT OPERATION COORDINATION DOCUMENT

DESOTO CANYON BLOCK 618

OCS-G-23526

The proposed activities described in detail in this Development Operation Coordination Document comply with Alabama's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

DOMINION EXPLORATION & PRODUCTION, INC.
Operator

David McBride
Director, Environmental, Health Safety & Regulatory
Certifying Official

March 31, 2005
Date

PUBLIC INFORMATION

STATE OF ALABAMA

COASTAL ZONE CONSISTENCY POLICIES

Coastal Resource Use Policies

1. Coastal Development

   The proposed development operations are located approximately 130 miles from the nearest Alabama shoreline, in OCS Federal Waters in the Gulf of Mexico and 160 miles east of the existing shorebase in Fourchon, Louisiana.

   Since the proposed project is development and short-term, in combination with our shorebase location in Fourchon, Louisiana, Dominion Exploration & Production, Inc. does not believe our operations will impact or need to pursue coastal development activities in Alabama at this time.

2. Mineral Resource Exploration and Extraction

   Dominion Exploration & Production, Inc. does not propose to extract solid minerals from the State of Alabama as a part of this proposed plan. This plan proposes the development of oil and gas hydrocarbons in OCS Federal Waters, Gulf of Mexico. The Alabama shoreline will be approximately 130 miles north of our proposed development operations.

3. Commercial Fishing

   The activities proposed in this plan are located approximately 130 miles south of Alabama's shoreline. There is no associated dredging and/or spoil deposition proposed in this plan. While actively discharging overboard, water quality in the area of the discharge locations may temporarily be affected. It is expected that water quality will return to pre-development activity levels once operations cease. These discharges should not adversely impact the water column biota, including fish larva, since it contains low toxicity levels and is dispersed rapidly.

   While overboard discharges (completion fluid and cuttings) could possibly bury or smother some benthic organisms, monitoring programs and modeling studies indicate that this effect would be contained to an area of a few hectares around each well location. These impacts are temporary and recovery is expected over a period of months to years.

   Other allowable overboard discharges include sanitary and domestic waste, deck drainage from the drilling rig, uncontaminated seawater for cooling machinery, and desalination brine. Localized short-term impacts are expected in the general area of these discharges. In the event of a oil or diesel spill Dominion Exploration & Production, Inc. will respond as planned in their Regional and Subregional Oil Spill Response Plan and will address any potential impact to Alabama's coastal waters or shoreline. The drilling rig is equipped with equipment and technology to prevent well control or blowout situations from adversely impacting the environment.

   Dominion Exploration & Production, Inc.'s development activities proposed in this plan are consistent with the state's enforceable policies for the protection and preservation of the coastal areas and marine life.

4. Hazard Management

   The development activities proposed in De Soto Canyon 618 should not cause impact to Alabama's coastal area or interfere with Alabama's measures to protect this area from natural hazards. Since the proposed operations are development and short-term, Dominion Exploration & Production, Inc. does not see a need to develop any coastal or onshore Alabama sites which could impact their hazard management measures.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possibly following the plan prescribed in their Regional and Subregional Oil Spill Response Plan.

5. Shoreline Erosion

Dominion Exploration & Production, Inc. has proposed their onshore base in Fourchon, Louisiana and does not propose any construction or development, dredging or filling activities in Alabama coast waters or land. Travel routes to the shore base from De Soto Canyon 618 will be in a straight line to Fourchon and will avoid any recreational trail systems as established by the State of Alabama. Dominion Exploration & Production, Inc. believes these proposed activities are consistent with the enforceable policies of the State of Alabama.

6. Recreation

Dominion Exploration & Production, Inc. has proposed their onshore base in Fourchon, Louisiana and does not propose any construction or development, dredging or filling activities in Alabama coast waters or land. Travel routes to the shore base from De Soto Canyon 618 will be in a straight line to Fourchon and will avoid any recreational systems as established by the State of Alabama. Dominion Exploration & Production, Inc. believes these proposed activities are consistent with the enforceable policies of the State of Alabama and do not see the need for new use of Alabama lands or water and no new vehicle traffic on land.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possibly following the plan prescribed in their Regional and Subregional Oil Spill Response Plan.

The manner in which Dominion Exploration & Production, Inc. operates and would respond to spill as outlined in their Regional and Subregional Oil Spill response plans are considered consistent with Alabama's enforceable policies to protect and maintain Alabama's land and water areas for outdoor recreation, conservation and wildlife preservation.

7. Transportation

Since the proposed project is development and short-term, in combination with our shorebase location in Fourchon, Louisiana, Dominion Exploration & Production, Inc. does not believe our operations will adversely impact the transportation system for the State of Alabama.

Natural Resources Protection Policy

1. Biological Productivity

The activities proposed in this plan are located approximately 130 miles south of Alabama's shoreline. Dominion Exploration & Production, Inc. shorebase will be located 160 miles west of De Soto Canyon 618 in Fourchon, Louisiana. The operations proposed in this plan are development and short-term, and Dominion Exploration & Production, Inc. doesn't foresee any adverse impacts to the biological productivity of the coastal area and/or coastal resources.

2. Water Quality

Dominion Exploration & Production, Inc. has proposed their onshore base in Fourchon, Louisiana and does not propose any construction or development, dredging or filling activities in Alabama coast waters or land. There should be no adverse impacts to Alabama's water resources. While actively discharging overboard, water quality in the area of the discharge locations may temporarily be affected. It is expected that water quality will return to pre-development activity levels once operations cease. The should in no way impact Alabama's shoreline or water resources especially since the discharge effects will be localized to the individual well areas. Dominion Exploration & Production, Inc. believes these proposed activities are consistent with the enforceable policies of the State of Alabama.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possibly following the plan prescribed in their Regional and Subregional Oil Spill Response Plan.

The manner in which Dominion Exploration & Production, Inc. operates and would respond to a spill as outlined in their Regional and Subregional Oil Spill response plans are considered consistent with Alabama's enforceable policies to protect and conserve Alabama's surface and ground water.

Waste from the proposed development project that is to be discharged overboard, such as completion fluids and cuttings, must first be tested for toxicity limitations per EPA's NPDES General Permit GMG280000. Other dischargeable waste such as ground food will first be run through a 25-millimeter mesh screen before being discharged overboard per U. S. Coast Guard's Marine Pollution Research and Control Act (MARPOL). Other solid wasted will be manifested and sent to an approved onshore disposal site within the State of Louisiana via an offshore support vessel. These solid wastes will be disposed of per the State of Louisiana's Department of Environmental Quality's regulations.

3. Water Resources

The proposed development operations are located approximately 130 miles from the nearest Alabama shoreline, in OCS Federal Waters in the Gulf of Mexico and 160 miles east of the existing shorebase in Fourchon, Louisiana. The operations proposed in this plan are development and short-term, and Dominion Exploration & Production, Inc. doesn't foresee any adverse impacts from runoff that would impact Alabama's coastal waters.

4. Air Quality

Calculations for the air emissions for the proposed development project was made using a matrix and formula prepared by the Minerals Management Service who has authorization from the Environmental Protection Agency for governing these emissions. This project will be below the exemption levels for Carbon Monoxide, Particulate Matter, Sulphur Oxides, Nitrogen Oxides and Volatile Organic Compounds.

5. Wetlands and Submerged Grassbeds

The proposed development operations are located approximately 130 miles from the nearest Alabama shoreline, in OCS Federal Waters in the Gulf of Mexico and 160 miles east of the existing shorebase in Fourchon, Louisiana. The operations proposed in this plan are development and short-term, and Dominion Exploration & Production, Inc. doesn't foresee any adverse impacts to wetlands and submerged grassbed's.

PUBLIC INFORMATION

6. Beach Dune Protection

Dominion Exploration & Production, Inc. has proposed their onshore base in Fourchon, Louisiana and does not propose any construction or development, dredging or filling activities in Alabama coast waters or land. Travel routes to the shore base from De Soto Canyon 618 will be in a straight line to Fourchon at lease 90 miles from the Alabama shoreline. Dominion Exploration & Production, Inc. believes these proposed activities will not impact the Alabama coastal areas.

Dominion Exploration & Production, Inc. conducts drilling and production operations to conform to industry standards. By using industry standards, a spill event or blowout is likely to be avoided thus causing the environment no adverse effects. Should a spill or blowout occur Dominion Exploration & Production, Inc. would respond as quickly as possibly following the plan prescribed in their Regional and Subregional Oil Spill Response Plan.

The manner in which Dominion Exploration & Production, Inc. operates and would respond to spill as outlined in their Regional and Subregional Oil Spill response plans are considered consistent with Alabama's enforceable policies to protect and conserve Alabama's beach and shore.

7. Wildlife Habitat Protection

Dominion Exploration & Production, Inc. has proposed their onshore base in Fourchon, Louisiana and does not foresee any adverse impact to Alabama 's wildlife habitats since we will not traverse upon Alabama's land or coastal waters. Travel routes to the shore base from De Soto Canyon 618 will be in a straight line to Fourchon at lease 90 miles from the Alabama shoreline. Since the proposed project is development and short-term, and discharges will be contained to the surface location of the well areas it should not impact Alabama's lands, coastal waters or wildlife. Waste from the proposed development project that is to be discharged overboard, such as drilling fluids and cuttings, must first be tested for toxicity limitations per EPA's NPDES General Permit GMG280000. Other dischargeable waste such as ground food will first be run through a 25-millimeter mesh screen before being discharged overboard per U. S. Coast Guard's Marine Pollution Research and Control Act (MARPOL). Other solid wasted will be manifested and sent to an approved onshore disposal site within the State of Louisiana via an offshore support vessel. These solid wastes will be disposed of per the State of Louisiana's Department of Environmental Quality's regulations.

The manner in which Dominion Exploration & Production, Inc. operates and would respond to a spill as outlined in their Regional and Subregional Oil Spill response plans are considered consistent with Alabama's enforceable policies to protect and conserve Alabama's beach and shore.

8. Endangered Species

The proposed activities in this plan are development and short-term and located approximately 130 miles from the Alabama shoreline. Dominion Exploration & Production, Inc. does not expect their proposed operations to affect any endangered species.

9. Cultural Resources Protection

Per Minerals Management Service's Notice to Lessees 2002-G01 De Soto Canyon 618 is in a low probability area for cultural resources and does not require an archeological report, therefore, we do not expect any adverse impact as a result of our development operations.

PUBLIC INFORMATION

COASTAL MANAGEMENT PROGRAM CONSISTENCY CERTIFICATION

DEVELOPMENT OPERATION COORDINATION DOCUMENT

DESOTO CANYON BLOCK 618

OCS-G-23526

The proposed activities described in detail in this Development Operation Coordination Document comply with Florida's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

DOMINION EXPLORATION & PRODUCTION, INC.
Operator

David McBride
Director, Environmental, Health Safety & Regulatory
Certifying Official

March 31, 2005
Date

CONSISTENCY EVALUATION

Dominion Exploration & Production, Inc.
Initial Development Operations Coordination Document
for DeSoto Canyon Block 618
Evaluation of Consistency with the Enforceable Policies
of the State of Florida Coastal Management Program

INTRODUCTION

This document is an evaluation by Dominion Exploration & Production, Inc. of its proposed Initial Development Operations Coordination Document (DOCD) in DeSoto Canyon Block 618 for any reasonably foreseeable coastal effects on the land, water uses, or natural resources, of the coastal zone of Florida, pursuant to the enforceable policies of the Florida Coastal Management Program (FCMP). The Initial DOCD is supported by numerous studies performed by government agencies and the oil and gas industry concerning impacts of oil and gas activities in the Gulf of Mexico and other offshore areas around the world. For citations to these studies and agencies, please see the Environmental Impact Analysis (EIA).

The Initial DOCD provides for the subsea completion of three wells, the installation of a subsea system in the lease area, and the production of the three wells as detailed in ***DOCD Appendix A***. Production from DeSoto Canyon Block 618 will be transported by pipeline to Anadarko's proposed Independence Hub in Mississippi Canyon Block 920 in the Central Planning Area. Installation and operation of the Independence Hub, as well as installation of a right-of-way pipeline connecting the lease area to the Independence Hub, are being permitted separately and are not part of the proposed action in the DOCD. The activities in DeSoto Canyon Block 618 will occur in outer continental shelf (OCS) waters, offshore Alabama, approximately 140 miles from the nearest Florida shoreline. Dominion believes that the planned activities will have little, if any, effect beyond the area immediately adjacent to the proposed activity sites, and that the possibility of any impacts to Florida's coastal zone is remote. However, Dominion has undertaken this consistency evaluation and believes that the proposed activities comply with the enforceable policies of the FCMP and will be conducted in a manner consistent with this Program.

The activities will be conducted in accordance with Minerals Management Service (MMS) and U.S. Environmental Protection Agency (USEPA) regulations, applicable Notices to Lessees (NTLs), conditions in the approved permits, and lease stipulations. All required Federal permits will be obtained, and all activities will be conducted in compliance with such regulations, NTLs, conditions, and stipulations.

CONSISTENCY ANALYSIS

The FCMP is authorized by the Florida Coastal Management Act, Chapter 380, Land and Water Management, Part II, Coastal Planning and Management, of the Florida Statutes. For this consistency certification, Dominion has analyzed the proposed action in relation to 16 chapters of

the Florida Statutes identified by the State as "core enforceable policies" having specific applicability to offshore oil and gas activity:

(1) Chapter 161 – Beach and Shore Preservation
(2) Chapter 252 – Emergency Management
(3) Chapter 253 – State Lands
(4) Chapter 258 – State Parks and Preserves
(5) Chapter 259 – Land Acquisitions for Conservation or Recreation
(6) Chapter 260 – Recreational Trails System
(7) Chapter 267 – Archives, History, and Records Management
(8) Chapter 288 – Commercial Development and Capital Improvements
(9) Chapter 370 – Saltwater Fisheries
(10) Chapter 372 – Wildlife
(11) Chapter 373 – Water Resources
(12) Chapter 375 – Outdoor Recreation and Conservation
(13) Chapter 376 – Pollution Discharge Prevention and Removal
(14) Chapter 377 – Energy Resources
(15) Chapter 403 – Environmental Control
(16) Chapter 582 – Soil and Water Conservation

1. Chapter 161 – Beach and Shore Preservation

The enforceable policies in this chapter recognize that coastal areas are among the State's most valuable natural, aesthetic, and economic resources and that they protect and provide habitat for a variety of plant and animal life. The State is required to protect beach and dune systems from imprudent activities that could weaken, damage, or destroy the integrity of the system, manage coastal sediments to reduce erosion, and restore and maintain critically eroding beaches. The State also designates coastal areas used, or likely to be used, by sea turtles for nesting and prohibits the removal of vegetative cover that binds sand. This chapter includes Part I, Regulation of Construction, Reconstruction, and Other Physical Activity; Part II, Beach and Shore Preservation Districts; and Part III, Coastal Zone Protection.

As Dominion will be using the existing dock and port facilities in the Port Fourchon, Louisiana area during the proposed operations, there will be no new construction, dredging, or filling on Florida's lands or waters that could weaken, damage, or destroy the integrity of the system or cause erosion of beaches. In addition, oil spill impacts on Florida beaches and other coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional Oil Spill Response Plan (OSRP), which addresses procedures for containment, recovery, and removal of an oil spill. The precautions included in Dominion's plan are consistent with the core policies of protecting beach and dune systems. Therefore, the proposed activities are consistent with Chapter 161.

2. Chapter 252 – Emergency Management

The enforceable policies of this chapter direct the State to reduce the vulnerability of its people and property to natural and manmade disasters; prepare for, respond to, and reduce the impacts of

natural and manmade disasters; and decrease the time and resources needed to recover from disasters. Disaster mitigation is necessary to ensure the common defense of Floridians' lives and to protect the public peace, health, and safety. The policies provide the means to assist in the prevention or mitigation of emergencies that may be caused or aggravated by the inadequate planning or regulation of facilities and land uses. State agencies are directed to keep land uses and facility construction under continuing study and identify areas that are particularly susceptible to natural or manmade catastrophic occurrences.

The proposed activities do not involve construction or operation of any facilities in the State of Florida. Therefore, a large oil spill is the only emergency that is considered relevant to this analysis. Dominion has developed a Sub-Regional OSRP that outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. An oil spill is highly unlikely to reach Florida waters or shorelines due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions included in Dominion's plan are consistent with the core policies of preparing for and responding to an oil spill and reducing the vulnerability of Florida's people and resources to impacts if such a spill occurred. Therefore, the proposed activities are consistent with Chapter 252.

3. Chapter 253 – State Lands

This chapter, in part, defines State-owned and State-managed lands and grants authority to acquire and lease lands and to grant rights-of-way and easements. The enforceable policies guide the management of State-owned and sovereign submerged lands and property by the Board of Trustees of the Internal Improvement Trust Fund (Trustees). Lands acquired for preservation, conservation, and recreation serve the public interest by contributing to the public health, welfare, and economy. In carrying out the requirements of this statute, the Trustees are directed to take necessary action to fully conserve and protect State lands, maintain natural conditions, protect and enhance natural areas and ecosystems, prevent damage and depredation, and preserve archaeological and historical resources. All submerged lands are considered single-use lands to be maintained in natural condition for the propagation of fish and wildlife and public recreation. Where multiple-uses are permitted, ecosystem integrity, recreational benefits, and wildlife values are conserved and protected.

During operations in the lease area, Dominion will not seek to lease or acquire rights-of-way across Florida State lands. The proposed operations will be conducted offshore Alabama, and at existing dock and port facilities located in the Port Fourchon, Louisiana area. There will be no activities requiring acquisition of rights-of-way or easements on Florida State lands. In addition, oil spill impacts on State-owned and managed lands are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies to fully conserve and protect State lands and other natural areas and ecosystems. Therefore, the proposed activities are consistent with Chapter 253.

4. Chapter 258 – State Parks and Preserves

State parks, aquatic preserves, and recreation areas are acquired to exemplify the State's natural values and to ensure that these values are conserved for all time. Parks and preserves are managed for the non-depleting use, enjoyment, and benefit of Floridians and visitors and to contribute to the State's tourist appeal. Aquatic preserves are recognized as having exceptional biological, aesthetic, and scientific value and are set aside for the benefit of future generations. Disruptive physical activities and polluting discharges are highly restricted in aquatic preserves. State managed wild and scenic rivers possess exceptionally remarkable and unique ecological, fish and wildlife, and recreational values and are designated for permanent preservation and enhancement for both the present and future.

Chapter 258 specifies limitations on dredge-and-fill activities, discharges, erection of structures, and drilling for oil or gas within aquatic preserves. Dominion's proposed activities in the lease area are not within or adjacent to any State parks or aquatic preserves. All discharges for the proposed activity will be governed by the National Pollutant Discharge Elimination System (NPDES) General Permit or an Individual Permit; impacts will be localized in deep, offshore waters, and will not have any effect on State parks, aquatic preserves, and recreation areas. Finally, oil spill impacts in these coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of preserving and protecting the natural resources and aesthetic values of Florida's State parks, aquatic preserves, and recreation areas. Therefore, the proposed activities are consistent with Chapter 258.

5. Chapter 259 – Land Acquisitions for Conservation or Recreation

This chapter discusses the "Land Conservation Act" and the acquisition of lands or water areas for preservation, conservation, and recreational purposes. The chapter indicates an area is of special importance to the State if it involves an endangered or natural resource in imminent danger of development, is of unique value to the State, will result in irreparable loss to the State, or will impair the State's ability to manage or protect other State-owned lands. The enforceable policies guide the acquisition and management of lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities for the benefit of future generations. Florida's legislature and citizens have made a tremendous financial commitment to long-term land acquisitions that will preserve and restore unique ecosystems, habitats, water resources, and recreational lands.

Dominion will be using existing dock and port facilities in Port Fourchon, Louisiana during the proposed activities. Therefore, there will be no new development, construction, dredging, or filling on Florida's lands or waters. In addition, all discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not have any effect on Florida lands being acquired or managed for preservation, conservation, or recreational purposes. Finally, oil spill impacts in these coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an

oil spill. The precautions in Dominion's plan are consistent with the core policies of managing lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities. Therefore, the proposed activities are consistent with Chapter 259.

6. Chapter 260 – Recreational Trails System

This chapter discusses the "Florida Greenways and Trails Act" and the State policies to conserve, develop, and use its natural resources for healthful and recreational purposes by the establishment of a "Florida Greenways and Trails System." The System serves to provide recreational opportunities, including, among others, canoeing, jogging, and historical and archaeological interpretation, by acquiring designated lands and waterways for open space to benefit environmentally sensitive lands and wildlife.

As Dominion will be using existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no new construction, dredging, or filling on Florida's lands or waters, and no motorized watercraft will conduct any operations within or adjacent to any defined canoe trail necessary to ensure the safe use of a water body for canoes. Therefore, the proposed activities are consistent with the core policies of Chapter 260.

7. Chapter 267 – Archives, History, and Records Management

This chapter discusses the "Florida Historical Resources Act," the State policy to locate, inventory, and evaluate historic properties, and the preservation by the Division of Historical Resources of the Department of State, of all historical property, including sunken or abandoned ships with intrinsic historical or archaeological value. The enforceable policies recognize the State's rich and unique heritage of historic resources and direct the State to locate, acquire, protect, preserve, operate, and interpret historic and archaeological resources for the benefit of current and future generations of Floridians. Objects or artifacts with intrinsic historic or archaeological value located on, or abandoned on, State-owned lands or State-owned submerged lands belong to the citizens of the State. The Act operates in conjunction with the National Historic Preservation Act of 1966 to require State and Federal agencies to consider the effect of their direct or indirect actions on historic and archaeological resources. These resources cannot be destroyed or altered unless no prudent alternative exists. Unavoidable impacts must be mitigated.

DeSoto Canyon Block 618 is not on the MMS list of blocks determined to have a high probability of either prehistoric or historical archaeological resources. Shallow hazards reports covering these blocks were submitted with the Initial Exploration Plans for these leases and did not detect any shipwrecks. It is highly unlikely that objects or artifacts with intrinsic historic or archaeological value would be affected by Dominion's activities. Therefore, the proposed activities are consistent with the core policies of Chapter 267.

8. Chapter 288 – Commercial Development and Capital Improvements

Chapter 288 establishes enforceable policies that promote and develop the general business, trade, and tourism components of the State economy. The policies include requirements to protect and promote the natural, coastal, historical, and cultural tourism assets of the State, foster the development of nature-based tourism and recreation, and upgrade the image of Florida as a quality destination. Natural resource-based tourism and recreational activities are critical sectors of Florida's economy. The needs of the environment must be balanced with the need for growth and economic development.

As Dominion will be using existing dock and port facilities in the Port Fourchon, Louisiana area during the proposed operations, there will be no activities conducted in Florida that would affect the general business, trade, or tourism components of the State economy. There will be no project-associated vessel or aircraft traffic in Florida waters, and there are no plans to purchase supplies or equipment in Florida. The project area is at least 140 miles from the nearest Florida shoreline, and activities will not be visible from the coast or Florida State waters. As discussed in the EIA, water quality impacts of routine discharges will be localized in the vicinity of the drillsites and will not affect Florida lands or waters. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 will minimize the chance of trash or debris being lost overboard and subsequently washing up on beaches. Oil spill impacts in Florida coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of protecting the natural, coastal, historical, and cultural tourism assets of the State and maintaining the image of Florida as a quality destination. Therefore, the proposed activities are consistent with Chapter 288.

9. Chapter 370 – Saltwater Fisheries

The enforceable policies of this chapter direct the State to conserve and manage its renewable marine fishery resources through the protection and management of marine habitat and saltwater fisheries. The paramount conservation and management objective is the continuing health and abundance of the resource. Best available information must be used to manage and protect the State's marine, crustacean, shellfish, and finfish resources and to regulate the commercial and recreational use of the State's saltwater fisheries to ensure optimum sustained benefits to the people of the State.

As discussed in the EIA, effluents from project activities may temporarily affect water quality in the immediate vicinity of the wellsites in the lease area. Discharges including well completion fluids, sanitary and domestic waste, deck drainage, uncontaminated seawater for cooling machinery, and desalination brine may cause localized, short-term impacts on water quality near the site. All discharges will be in compliance with the standards imposed by the NPDES General Permit or an Individual Permit. Water quality is expected to quickly return to normal in the area after operations have been completed. Due to the low toxicity and rapid dispersion of discharges, little or no impact on water column biota is likely, including fish larvae that recruit to nearshore nursery areas.

There is a very low probability that a spill may occur during operations. The potential impacts of these types of spills on Florida's coastal zone are discussed in the EIA. Dominion's Sub-Regional OSRP outlines response actions for specific hypothetical spill events. The Sub-Regional OSRP makes provisions for the use of a dispersant by boat or aerial application but notes that before a dispersant can be applied, Federal and State authorities must grant permission. Additional items that are addressed in the plan include provisions for inspection and maintenance of response equipment; required spill response drills; procedures for spill notification to government agencies; inventories of locally and nationally available response equipment; hierarchy of response team organization; provisions for disposal of wastes; and procedures for monitoring and predicting spill movement.

Finally, Dominion will be using the most modern dynamically positioned drillship in its proposed activities, with state-of-the-art equipment and technology for spill prevention, and will be operating in compliance with the NPDES General Permit or an Individual Permit regarding authorized discharges. If an oil spill should occur, Dominion's Sub-Regional OSRP addresses plans and procedures for containment, recovery, and removal. The precautions in Dominion's plan are consistent with the core policies of conserving and protecting marine habitat and saltwater fisheries and maintaining the continuing health and abundance of the resource. Therefore, Dominion's proposed activities are consistent with Chapter 370.

10. Chapter 372 – Wildlife

This chapter discusses the "Florida Endangered and Threatened Species Act" and its implementation by the Fish and Wildlife Conservation Commission to conserve and protect the fish and wildlife resources of the State, particularly those species defined as endangered or threatened. The Fish and Wildlife Conservation Commission has established a Wildlife Habitat Program, and a Conservation and Recreation Lands Program Trust Fund, for acquiring and managing lands for the conservation of fish and wildlife. The enforceable policies direct the State to conserve its diverse fish and wildlife resources. Florida has more endangered or threatened species than any other continental state; therefore, the protection of species defined as endangered or threatened is emphasized. State lands that provide habitat needed by these species shall be maintained and enhanced for their value as fish and wildlife habitat. Substances thrown, spilled, drained, or discharged into fresh waters that injure or kill fish are expressly prohibited.

As Dominion will be using the existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no new construction, dredging, or filling on Florida's lands or waters to affect wildlife habitats or recreation lands. As discussed in the EIA, routine discharges will be localized in the vicinity of the drillsites and will not have any effects on Florida lands, waters, or wildlife. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 will minimize the chance of trash or debris being lost overboard and subsequently endangering Florida wildlife. Oil spill impacts in Florida coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of conserving

Florida's fish and wildlife resources, including endangered or threatened species. Therefore, the proposed activities are consistent with Chapter 372.

11. Chapter 373 – Water Resources

This chapter establishes enforceable policies that guide the management and protection of water resources, water quality, and environmental quality. The policies address the conservation of surface and ground waters for full beneficial use; sustainable water management; preservation of natural resources, fish, and wildlife; protecting public land; and promoting the health and general welfare of Floridians. The State manages and conserves water and related natural resources by determining whether activities will unreasonably consume water, degrade water quality, or adversely affect environmental values such as protected species habitat, recreational pursuits, and marine productivity.

As Dominion will be using the existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no usage of Florida water resources and no new construction, dredging, or filling on Florida's lands or waters to affect water quality, protected habitat, recreational pursuits, or marine productivity. All discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. In addition, oil spill impacts on Florida water resources are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of conserving surface and ground waters for full beneficial use and protecting natural resources, fish, wildlife, and public lands. Therefore, the proposed activities are consistent with Chapter 373.

12. Chapter 375 – Outdoor Recreation and Conservation

This chapter discusses the "Outdoor Recreation and Conservation Act of 1963" and the responsibility of the Florida Department of Environmental Protection (FDEP) to implement a comprehensive outdoor recreation plan in cooperation with the Fish and Wildlife Conservation Commission and the water management districts. The FDEP participates in the land and water conservation fund program to acquire lands and water areas for outdoor recreation, natural resource conservation, wildlife and forestry management, and water conservation and control. The Act also empowers the Fish and Wildlife Conservation Commission to regulate motor vehicle access and traffic control on public lands.

Dominion will be using the existing dock and port facilities in the Port Fourchon, Louisiana area. Therefore, there will be no new construction, dredging, or filling on Florida's lands or waters, and no new vehicle traffic on public lands. In addition, oil spill impacts on Florida conservation, recreation, or resource areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of preserving Florida's lands and water areas for outdoor recreation, conservation, and wildlife management. Therefore, the proposed activities are consistent with Chapter 375.

13. Chapter 376 – Pollution Discharge Prevention and Removal

Chapter 376 declares that the preservation of the seacoast as a source of public and private recreation and the preservation of water and certain lands are matters of the highest urgency and priority and shall be accomplished by maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands adjoining the seacoast in as close to a pristine condition as possible. The discharge of pollutants into or upon any coastal waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the State is declared to be inimical to the paramount interests of the State and is prohibited. The statute provides for hazards and threats of danger and damages resulting from any pollutant discharge to be evaluated, requires the prompt containment and removal of pollution, provides penalties for violations, and ensures the prompt payment of reasonable damages from a discharge. Portions of Chapter 376 serve as a complement to the national contingency plan portions of the Federal Water Pollution Control Act.

Dominion has prepared a Sub-Regional OSRP as required for the Eastern Planning Area, which must be consistent with the National Contingency Plan and with the Oil Pollution Act of 1990 (OPA) in order to obtain MMS approval. As Dominion will be using the existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no transfers between vessels and Florida onshore facilities. As to transfers between offshore facilities and vessels, Dominion's Sub-Regional OSRP outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. The precautions in Dominion's plan are consistent with the core policies of preventing unauthorized pollutant discharges and maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands in as close to a pristine condition as possible. Therefore, the proposed activities are consistent with Chapter 376.

14. Chapter 377 – Energy Resources

The State's policy is to conserve and control the oil and gas resources in the State, including products made from these resources, and to safeguard the health, property, and welfare of Floridians. To accomplish this, Chapter 377 addresses the regulation, planning, and development of the energy resources of the State. The FDEP is authorized to regulate all phases of exploration, drilling, and production of oil, gas, and other petroleum products in the State. This chapter describes the permitting requirements and criteria necessary to drill for and develop oil and gas. FDEP rules ensure that all precautions are taken to prevent the spillage of oil or any other pollutant in all phases of extraction and transportation.

The State explicitly prohibits pollution resulting from drilling and production activities. No person drilling for or producing oil, gas, or other petroleum products may pollute land or water; damage aquatic or marine life, wildlife, birds, or public or private property; or allow any extraneous matter to enter or damage any mineral or freshwater-bearing formation. Penalties for violations of any provisions of this chapter are detailed.

The proposed project does not involve any drilling or production activities in Florida that are regulated by the FDEP. All discharges will be in accordance with the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters, damage wildlife or public or private property, or contaminate any mineral or freshwater-bearing formation. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently washing up on Florida shorelines or waters. Oil spill impacts in Florida coastal areas are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of safeguarding the health, property, and welfare of Floridians and preventing pollution during offshore activities. Therefore, the proposed activities are consistent with Chapter 377.

15. Chapter 403 – Environmental Control

Chapter 403 establishes enforceable policies that guide environmental control efforts by conserving State waters, protecting and improving water quality for consumption and for the propagation of fish and wildlife, and maintaining air quality to protect human health and plant and animal life. Statutory provisions are enacted to protect the health, peace, safety, and general welfare of the people of the State. The statute provides wide-ranging authority to address various environmental control concerns, including air and water pollution, resource recovery and management, solid and hazardous waste management, drinking water protection, pollution prevention, ecosystem management, and natural gas transmission pipeline siting. Chapter 403 declares that pollution of the air and waters is a menace to public health and is harmful to wildlife, fish, and other aquatic life and that the policy of the State is to conserve, maintain, and improve its waters and air quality and develop a comprehensive program for its prevention, abatement, and control of pollution by establishing ambient air and water quality standards.

The Projected Air Quality Emissions Report (***DOCD Appendix G***) for the proposed activities falls well below allowable exemption levels and will not result in onshore ambient air concentrations above significant levels as prescribed in the regulations. Therefore, the proposed activities are consistent with the core policies of Chapter 403.

All discharges (inclusive of well completion fluids, sanitary and domestic wastes, deck drainage, and miscellaneous wastes) shall be in compliance with the standards imposed by the USEPA Region IV NPDES General Permit or an Individual Permit. As discussed in the EIA, discharges from project activities may temporarily affect water quality in the immediate vicinity of the drillsites but would not affect water quality or wildlife in Florida State waters. Pollution of coastal waters by an oil spill is highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. The precautions in Dominion's plan are consistent with the core policies of conserving State waters and protecting water and air quality. Therefore, the proposed activities are consistent with Chapter 403.

16. Chapter 582 – Soil and Water Conservation

The enforceable policies in this chapter require the conservation, development, and use of soil and water resources to preserve natural resources and to control and prevent soil erosion. Soil stabilization preserves State and private lands, protects wildlife habitat, maintains water quality, assists in the maintenance of navigable waterways, and prevents the impairment of dams and reservoirs.

The proposed operations will be conducted offshore Alabama and at Dominion's existing dock and port facilities located in the Port Fourchon, Louisiana area. Routine operations will not involve any construction or other activities in Florida that could result in soil erosion. Oil spill impacts on Florida soils are highly unlikely due to the distance from shore and the measures detailed in Dominion's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill. Any cleanup or recovery activities in Florida would be conducted using applicable best management practices to minimize soil erosion. The precautions in Dominion's plan are consistent with the core policies of preserving Florida's natural resources and preventing soil erosion. Therefore, the proposed activities are consistent with Chapter 582.

SPECIFIC INFORMATION REQUIREMENTS

The State of Florida has specifically identified items (a) through (l) as required data and information, in accordance with NTL No. 2003-G17, Appendix I, Attachment 1. All of the information that is applicable to the proposed activity is provided in the EIA or elsewhere in the DOCD, as referenced below.

(a) A discussion of the measures used to prevent the discharge of oils and greases from drilling rigs or platforms during rainfall and routine operations.
- *This information is provided in **DOCD Appendix A**.*

(b) The following socioeconomic information:
(1) The estimated number of persons you expect to employ in support of your offshore, onshore, and transportation activities within the State of Florida, and where possible, the approximate number of new employees and families likely to move into the affected area;
- *Not applicable to the proposed activity.*

(2) An estimate of the major supplies, services, energy, water, or other resources you expect to purchase within the State of Florida and that are necessary for you to carry out the activities in your DOCD; and
- *Not applicable to the proposed activity.*

(3) The types of contractors or vendors within the State of Florida you will need to carry out the activities in your DOCD.
- *Not applicable to the proposed activity.*

(c) A complete description of any dredging and filling activities associated with the construction or expansion of any onshore facilities in Florida you will use to support your proposed activities.
- *Not applicable to the proposed activity.*

(d) The type and volume of chemical constituents of drilling muds anticipated to be used.
- *Not applicable to the proposed activity.*

(e) Detailed information on the presence of threatened and endangered species in the project area.
- *Information is provided in the following EIA sections: B.1.7 (Marine Mammals), B.1.8 (Sea Turtles), B.3.3 (Shore Birds and Coastal Nesting Birds), B.4.4 (Gulf Sturgeon), and B.4.5 (Endangered Beach Mice and Florida Salt Marsh Vole). Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA.*

(f) A discussion of air and water quality in and adjacent to the area of proposed activity or potential impact.
- *Information is provided in the following EIA sections: B.1.9 (Air Quality) and B.1.5 (Water Quality). Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA.*

(g) A thorough description of coastal habitats (including bays, bayous, sounds, estuaries, lagoons, rivers, streams, or other bodies of water) and their associated flora and fauna that could be affected by the proposed activities.
- *Information is provided in the following EIA sections: B.3.1 (Beaches), B.3.2 (Wetlands), B.3.3 (Shore Birds and Coastal Nesting Birds), B.3.4 (Coastal Wildlife Refuges), and B.3.5 (Wilderness Areas). Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA, and in the Sub-Regional OSRP.*

(h) A description of any historical and archaeological resources that could be affected by your proposed activities. Describe the measures you will use to protect these resources. Describe thoroughly the surveys you used to locate and identify these resources.
- *Information is provided in the following EIA sections: B.1.10 (Shipwreck Sites, known or potential) and B.1.11 (Prehistoric Archaeological Sites). Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA.*

(i) A discussion of sensitive or critical State and Federal resources, including specially designated and managed areas, that may be impacted by the project (planned activities or accidental discharges).
- *Information is provided in the following EIA sections: B.3.4 (Coastal Wildlife Refuges), B.3.5 (Wilderness Areas), and B.4.3 (Offshore Areas of Concern). Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA.*

(j) A description of the potential for and types of direct, indirect or secondary, and cumulative impacts of the project (planned project activities and accidents) on: air quality; water quality and quantity; marine and coastal habitats; flora and fauna (including threatened and endangered species); coastal littoral processes; publicly owned and managed lands; cultural or historic resources; recreational and commercial fisheries; communities; the state and local economy; navigation; marine productivity; and other uses of the area.
- *Information is provided in the EIA sections listed below. Further information is provided in the Sale 181 EIS and Sale 189/197 EIS, which are referenced in the EIA.*
  - *Air Quality: Section B.1.9*
  - *Water Quality: Section B.1.5*
  - *Marine and Coastal Habitats: Sections B.1.1, B.1.2, B.1.3, B.1.4, B.2.1, B.3.1, B.3.2, B.3.4, B.3.5, B.4.1, B.4.2, and B.4.3*

- *Flora and Fauna (including endangered/threatened species): Sections B.1.1, B.1.2, B.1.3, B.1.4, B.1.7, B.1.8, B.2.2, B.4.1, B.4.2, B.4.4, and B.4.5*
- *Coastal Littoral Processes: Section B.4.10*
- *Publicly Owned and Managed Lands: Sections B.3.4, B.3.5, and B.4.7*
- *Cultural or Historic Resources: Sections B.1.10 and B.1.11*
- *Recreational and Commercial Fisheries: Sections B.1.6 and B.2.1*
- *Communities: Section B.4.6*
- *State and Local Economy: Sections B.4.6 and B.4.8*
- *Navigation: Section B.4.11*
- *Marine Productivity: Sections B.2.1, B.4.1, and B.4.2*
- *Other Uses of the Area: Section B.4.12*

(k) A description of measures you will take to avoid, minimize, and mitigate impacts to marine and coastal environments and habitats, biota, and threatened and endangered species.

- *As noted in EIA Section E, the proposed action includes all of the routine mitigation measures required by laws and regulations, including all applicable Federal, State, and local requirements concerning air emissions, discharges to water, and solid waste disposal, as well as any additional permit requirements. All project activities will be conducted under the Sub-Regional OSRP.*

(l) Existing and planned monitoring that will measure environmental conditions, including but not limited to that required by lease stipulation.

- *No monitoring of environmental conditions is included in the proposed action. Dominion is familiar with the remotely operated vehicle (ROV) survey and reporting provisions of NTL 2003-G03 and has prepared a survey plan in accordance with MMS requirements.*

Appendix J
Plan Information Form

Attachments to Appendix J:

- OCS Plan Information Form

PUBLIC INFORMATION

U.S. Department of the Interior
Minerals Management Service

OMB Control Number: 1010-0049
OMB Approval Expires: August 31, 2006

OCS PLAN INFORMATION FORM

General Information

Type of OCS Plan:		Exploration Plan (EP)	X Development Operations Coordination Document (DOCD)
Company Name:	Dominion Exploration & Production, Inc.	MMS Operator Number:	00282
Address:	1450 Poydras Street	Contact Person:	KATHY GOWLAND
	New Orleans, Louisiana 70112-6000	Phone Number:	504-593-7152
		E-Mail Address:	Kathy_R_Gowland@dom.com

Lease(s):	OCS-G-23526	Area:	DC	Block(s):	618	Project Name (If Applicable):	San Jacinto/Indep		
Objective(s):		Oil		Gas	X	Sulphur		Salt	Onshore Base: Fourchon	Distance to Closest Land (Miles):	90

Description of Proposed Activities (Mark all that apply)

	Exploration drilling		Development drilling
X	Well completion		Installation of production platform
	Well test flaring (for more than 48 hours)		Installation of production facilities
	Installation of caisson or platform as well protection structure		Installation of satellite structure
X	Installation of subsea wellheads and/or manifolds	X	Commence production
X	Installation of lease term pipelines		Other (Specify and describe)

Have you submitted or do you plan to submit a Conservation Information Document to accompany this plan?	X	Yes		No
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?		Yes	X	No
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS?	X	Yes		No

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Install 8" pipeline and 6" jumpers and umbilical	03/01/2006	03/04/2006	4
Subsea complete well DC 618 #1	04/01/2006	04/30/2006	30
Subsea complete well DC 618 #2	05/01/2006	05/30/2006	30
Tie in to DC 620 8" pipeline	06/01/2006	06/01/2006	1
Commence Production	09/01/2006		

Description of Drilling Rig

	Jackup		Drillship
	Gorilla Jackup		Platform rig
x	Semisubmersible		Submersible
	DP Semisubmersible		Other (Attach Description)
Drilling Rig Name (If Known):			

Description of Production Platform

	Caisson		Tension leg platform
	Well protector		Compliant tower
	Fixed platform		Guyed tower
X	Subsea manifold		Floating production system
	Spar		Other (Attach Description)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (Inches)	Length (Feet)
DC 618	DC 620	8.625	5600'

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #01		Subsea Completion	
Anchor Radius (if applicable) in feet: See Anchor Pattern Plat - Appendix A		Yes X	No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS 23526	OCS
Area Name	Desoto Canyon	
Block No.	618	
Blockline Departures (in feet)	N/S Departure: F N L 5,774.16	N/S Departure: F___ L
	E/W Departure: 1,617.70 F E L	E/W Departure: F L
Lambert X-Y coordinates	X: 1,376,462.30	X:
	Y: 10,290,225.84	Y:
Latitude/ Longitude	Latitude 28° 21' 12.736" N	Latitude
	Longitude -87° 49' 15.327" W	Longitude
	TVD (Feet):	MD (Feet): / Water Depth (Feet): 7,847'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
Appendix A			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #02			Subsea Completion
Anchor Radius (if applicable) in feet: See Anchor Pattern Plat - Appendix A			Yes X / No
	Surface Location	**Bottom-Hole Location (For Wells)**	
Lease No.	OCS 23526	OCS	
Area Name	Desoto Canyon		
Block No.	618		
Blockline Departures (in feet)	N/S Departure: F N L 4,887.05	N/S Departure: F___ L	
	E/W Departure: 6,948.81 F E L	E/W Departure: F L	
Lambert X-Y coordinates	X: 1,371,131.19	X:	
	Y: 10,291,112.95	Y:	
Latitude/ Longitude	Latitude 28° 21' 21.160" N	Latitude	
	Longitude -87° 50' 15.080" W	Longitude	
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 7,847'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
Appendix A			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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OCS PLAN INFORMATION FORM (CONTINUED)
Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): Desoto Canyon Block 618 Well #03 (Location B)		Subsea Completion	
Anchor Radius (if applicable) in feet: See Anchor Pattern Plat - Appendix A		Yes X	No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS 23526	OCS
Area Name	Desoto Canyon	
Block No.	618	
Blockline Departures (in feet)	N/S Departure: 3419 F S L	N/S Departure: F___ L
	E/W Departure: 1628 F E L	E/W Departure: F L
Lambert X-Y coordinates	X: 1,376,452.42	X:
	Y: 10,283,578.90	Y:
Latitude/ Longitude	Latitude 28° 21' 21.160" N	Latitude
	Longitude -87° 50' 15.080" W	Longitude
	TVD (Feet):	MD (Feet): Water Depth (Feet): 7,850'

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
Appendix A			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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